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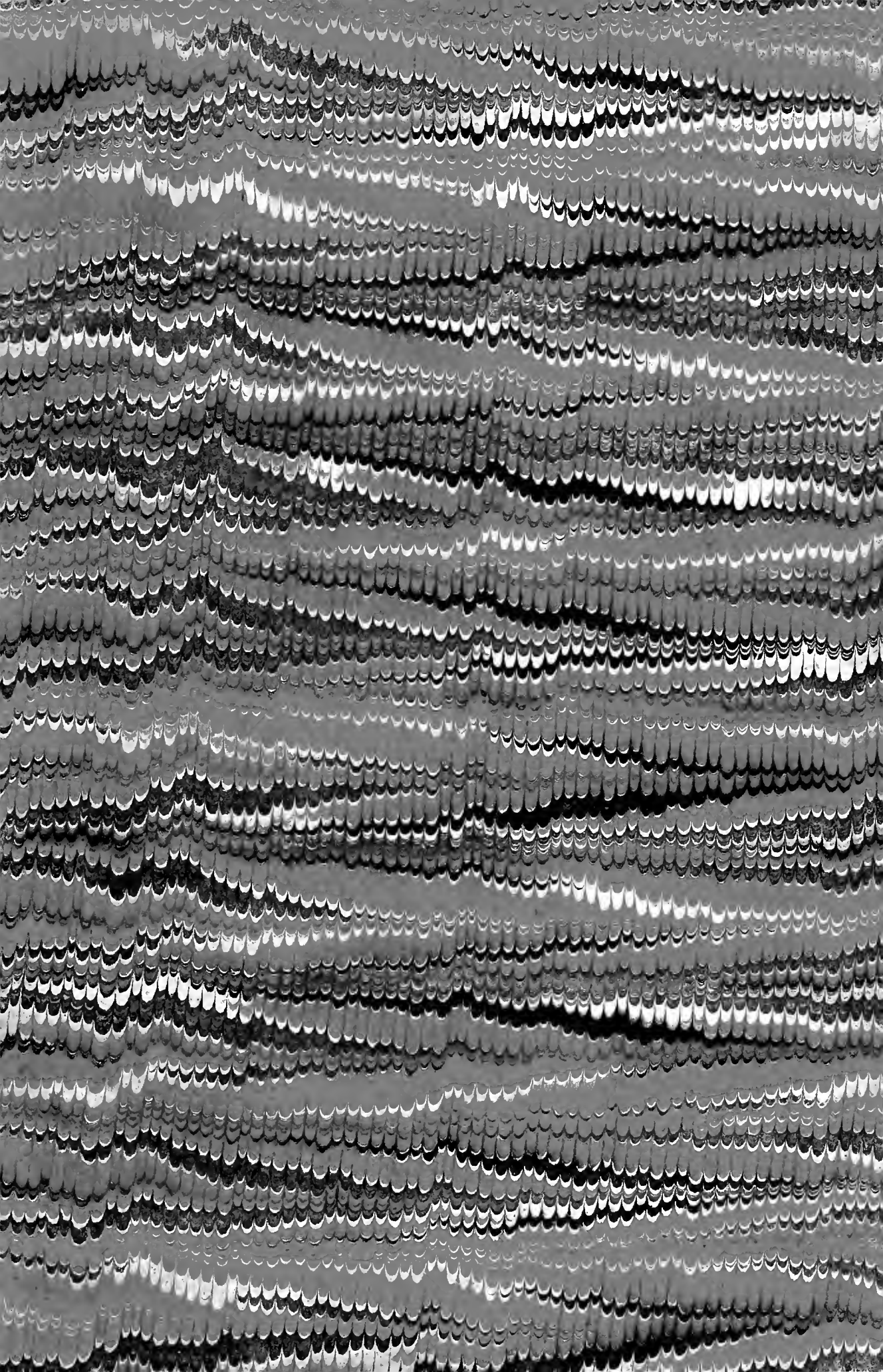
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UNITED STATES OF AMERICA.















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# OFFICIAL GAZETTE

OF THE

## UNITED STATES PATENT OFFICE.

### S U P P L E M E N T

CONTAINING THE

REVISED CLASSIFICATION OF SUBJECTS OF INVENTION,

ARRANGED BY DIVISIONS,

AND

THE SUB-CLASSES ARRANGED ALPHABETICALLY.

JANUARY 1, 1895.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1895:



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DEPARTMENT OF THE INTERIOR,

UNITED STATES PATENT OFFICE,

*Washington, D. C., January 1, 1895.*

The following is the official classification of patents and inventions in the Patent Office. No changes will be made therein except by order of the Commissioner.

Should occasion arise for any modification of this classification, either by the discontinuance of any title or by the addition of a new one, the matter will be presented to the Commissioner for his action.

Examiners will not transfer patented drawings from one class or sub-class to another except on the Commissioner's approval.

Changes in classes and sub-classes will be published in the OFFICIAL GAZETTE.

JOHN S. SEYMOUR,

*Commissioner of Patents.*

## SUBJECTS OF INVENTION.

Subjects of invention are divided into two hundred and thirteen classes, and assigned for examination to the thirty-four Examining Divisions of this Office, as follows:

### DIVISION I.—EXAMINER FOX.

#### *Classes.*

- 39. Fences.
- 55. Harrows and Diggers.
- 97. Plows.
- 111. Seeders and Planters.
- 47. Trees, Plants, and Flowers.

### DIVISION II.—EXAMINER I. V. TOWNSEND.

#### *Classes.*

- 6. Bee-Culture.
- 119. Care of Live Stock.
- 31. Dairy.
- 184. Lubricators.
- 185. Mechanical Motors.
- 100. Presses.
- 131. Tobacco.

### DIVISION III.—EXAMINER BYRNES.

#### *Classes.*

- 148. Annealing and Tempering.
- 96. Coating with Metal.
- 204. Electro-Chemistry.
- 22. Metal-Founding.
- 75. Metallurgy.
- 207. Shaping Fluid Metal.

### DIVISION IV.—EXAMINER POND.

#### *Classes.*

- 14. Bridges.
- 37. Excavating.
- 159. Fire Escapes and Ladders.
- 183. Fire-Proof Buildings.
- 61. Hydraulic Engineering.
- 189. Iron Structures.
- 72. Masonry.
- 104. Railways.
- 200. Towers.

### DIVISION V.—EXAMINER LANE.

#### *Classes.*

- 11. Book-Binding.
- 41. Fine Arts.
- 63. Jewelry.
- 84. Music.
- 120. Stationery.

### DIVISION VI.—EXAMINER LITTLEWOOD.

#### *Classes.*

- 8. Bleaching and Dyeing.
- 23. Chemicals.
- 52. Explosives.
- 71. Fertilizers.
- 167. Medicines.
- 95. Photography.
- 99. Preserving.
- 127. Sugar and Salt.
- 128. Surgery.

### DIVISION VII.—EXAMINER SKINNER.

#### *Classes.*

- 46. Games and Toys.
- 56. Harvesters.
- 208. Velocipedes.

### DIVISION VIII.—ACT. EXAM'R McROBERTS.

#### *Classes.*

- 5. Beds.
- 155. Chairs.
- 156. Curtains, Shades, and Sereens.
- 45. Furniture.
- 65. Kitchen and Table Articles.
- 211. Store Furniture.

### DIVISION IX.—EXAMINER TRYON.

#### *Classes.*

- 4. Baths and Closets.
- 169. Fire-Extinguishers.
- 138. Hydraulic Motors.
- 103. Pumps.
- 182. Sewerage.
- 137. Water-Distribution.

### DIVISION X.—EXAMINER SANDERS.

#### *Classes.*

- 21. Carriages and Wagons.

### DIVISION XI.—EXAMINER HARMON.

#### *Classes.*

- 12. Boots and Shoes.
- 24. Clasps, Buckles, and Buttons.
- 54. Harness.
- 60. Hose and Belting.
- 69. Leather-Working Machinery.

DIVISION XII.—EXAM'R AUGHINBAUGH.

*Classes.*

- 192. Clutches.
- 193. Conveyers.
- 212. Cranes and Derricks.
- 187. Elevators.
- 57. Hoisting.
- 64. Journal-Boxes, Pulleys, and Shafting.
- 74. Machine Elements.
- 186. Store Service.

DIVISION XIII.—EXAMINER BLODGETT.

*Classes.*

- 86. Arms and Projectiles. Making
- 59. Chains, Staples, and Horseshoes.
- 30. Cutlery.
- 53. Hardware-Making.
- 10. Metal Bolts, Nuts, Rivets, and Screws.
- 77. Metal Boring and Drilling.
- 205. Metal-Drawing.
- 78. Metal-Forging.
- 80. Metal-Rolling.
- 76. Metal Tools and Implements. Making
- 134. Metal-Tube Manufacture.
- 82. Metal Turning, Planing, and Milling.
- 206. Metal-Welding.
- 85. Nails and Spikes.
- 163. Needles and Pins.
- 152. Wagon, Car, and Track Irons.

DIVISION XIV.—EXAMINER MAXSON.

*Classes.*

- 194. Coin-Controlled Apparatus.
- 168. Farriery.
- 153. Metal-Bending.
- 201. Metal-Ornamenting.
- 79. Metal Personal Wear. Making
- 164. Metal Punching and Shearing.
- 81. Metal-Working Tools.
- 151. Nut and Bolt Locks.
- 113. Sheet-Metal Ware. Making
- 140. Wire-Working.

DIVISION XV.—EXAMINER BRICKENSTEIN.

*Classes.*

- 106. Artificial Stone, Lime, and Cement.
- 107. Bread, Cracker, and Lozenge Making.
- 18. Caoutchouc and Minor Plastics.
- 25. Clay and Pottery.
- 154. Composite Roofings and Coverings.
- 44. Fuel.
- 49. Glass.
- 92. Paper-Making.
- 94. Paving.

DIVISION XVI.—EXAMINER BISSING.

*Classes.*

- 176. Electric Lighting.
- 177. Electric Signaling.
- 175. Electricity. Special applications.
- 178. Telegraphy.
- 179. Telephony.

DIVISION XVII.—EXAMINER RICE.

*Classes.*

- 93. Paper-Manufactures.
- 101. Printing.

DIVISION XVIII.—EXAMINER FOWLER.

*Classes.*

- 162. Injectors and Ejectors.
- 160. Steam and Vacuum Pumps.
- 122. Steam-Boilers.
- 110. Steam-Boiler Furnaces.
- 121. Steam-Engines.
- 136. Steam-Engine Valves.

DIVISION XIX.—EXAMINER STEWARD.

*Classes.*

- 126. Stoves and Furnaces.

DIVISION XX.—EXAMINER WILKINSON.

*Classes.*

- 3. Artificial Limbs.
- 16. Builders' Hardware.
- 32. Dentistry.
- 70. Locks and Latches.
- 109. Safes.
- 27. Undertaking.

DIVISION XXI.—EXAMINER HAINS.

*Classes.*

- 13. Brakes and Gins.
- 19. Carding.
- 26. Cloth-Finishing.
- 28. Cordage.
- 38. Felt and Fur.
- 66. Knitting and Netting.
- 117. Silk.
- 118. Spinning.
- 139. Weaving.

DIVISION XXII.—EXAMINER SEATON.

*Classes.*

- 9. Boats.
- 42. Firearms.
- 43. Fishing and Trapping.
- 115. Marine Propulsion.
- 89. Ordnance.
- 102. Projectiles.
- 114. Ships.
- 116. Signals.

DIVISION XXIII.—EXAMINER GREELEY.

*Classes.*

- 181. Acoustics.
- 33. Drafting.
- 58. Horology.
- 73. Measuring-Instruments.

DIVISION XXIV.—EXAMINER PIERCE.

*Classes.*

- 165. DESIGNS.
- 2. Apparel.
- 29. Crinoline and Corsets.
- 112. Sewing-Machines.
- 132. Toilet.
- 135. Umbrellas and Canes.

DIVISION XXV.—EXAMINER WYNNE.

*Classes.*

- 166. Artesian and Oil Wells.
- 17. Butchering.
- 83. Mills.
- 125. Stone-Working.
- 130. Thrashing.
- 146. Vegetable Cutters and Crushers.

DIVISION XXVI.—EXAM'R GEO. D. SEELY.

*Classes.*

- 173. Electricity. Conductors.
- 191. Electricity. Electric Railways.
- 171. Electricity. Generation.
- 174. Electricity. Medical and Surgical.
- 172. Electricity. Motive Power.

DIVISION XXVII.—EXAMINER GOULD.

*Classes.*

- 15. Brushing and Scrubbing.
- 51. Grinding and Polishing.
- 68. Laundry.
- 141. Washing Apparatus.

DIVISION XXVIII.—EX. W. W. TOWNSEND.

*Classes.*

- 123. Air and Gas Engines.
- 34. Driers.
- 98. Pneumatics.
- 62. Refrigeration.
- 170. Wind-Wheels.

DIVISION XXIX.—EXAMINER MORRIS.

*Classes.*

- 20. Carpentry.
- 147. Coopering.
- 108. Roofing.
- 157. Wheelwright-Machines.
- 143. Wood-Sawing.
- 142. Wood-Turning.
- 144. Wood-Working Machines.
- 145. Wood-Working Tools.

DIVISION XXX.—EXAMINER WOODWARD.

*Classes.*

- 67. Lamps and Gas-Fittings.
- 199. Linotyping.
- 198. Matrix-Making.
- 88. Optics.
- 197. Type-Writing Machines.

DIVISION XXXI.—EXAMINER ELY.

*Classes.*

- 195. Alcohol.
- 203. Ammonia, Water, and Wood Distillation.
- 202. Charcoal and Coke.
- 35. Educational Appliances.
- 50. Fluid-Pressure Regulators.
- 48. Gas.
- 149. Hides, Skins, and Leather.
- 196. Mineral Oils.
- 87. Oils, Fats, and Glue.
- 91. Painting.

DIVISION XXXII.—ACT. EX. WITHERSPOON.

*Classes.*

- 180. Accouterments.
- 40. Advertising.
- 190. Baggage.
- 209. Carbonating Beverages.
- 210. Packaging and Dispensing Liquids.
- 150. Packing and Storing Vessels.

DIVISION XXXIII.—EXAM'R F. A. SEELY.

*Classes.*

LABELS AND PRINTS.  
TRADE-MARKS.

DIVISION XXXIV.—EXAMINER SIMPSON.

*Classes.*

- 188. Railway-Brakes.
- 213. Railway Draft-Appliances.
- 105. Railway Rolling-Stock.

**CLASSES ALPHABETICALLY ARRANGED.**

Div.	No.	Class.	Pats.	Div.	No.	Class.	Pats.
32	180	Accouterments	435	27	68	Laundry	7,633
23	181	Acoustics	401	11	69	Leather-working machinery	532
32	40	Advertising	1,922	30	139	Linotyping	98
28	123	Air and gas engines	1,025	20	70	Locks and latches	5,979
31	195	Alcohol	1,137	2	184	Lubricators	1,409
31	203	Ammonia, water, and wood distillation	255	12	74	Machine elements	4,785
3	148	Annealing and tempering	736	22	115	Marine propulsion	1,583
24	2	Apparel	5,479	4	72	Masonry	459
13	86	Arms and projectiles. Making	268	30	198	Matrix-making	114
25	166	Artesian and oil wells	1,771	23	73	Measuring-instruments	2,344
20	3	Artificial limbs	421	2	185	Mechanical motors	1,775
15	106	Artificial stone, lime, and cement	1,159	6	167	Medicines	1,332
32	190	Baggage	1,333	14	153	Metal-bending	658
9	4	Baths and closets	3,274	13	10	Metal bolts, nuts, rivets, and screws	2,396
8	5	Beds	5,014	13	77	Metal boring and drilling	1,242
2	6	Bee-culture	998	13	205	Metal-drawing	322
6	8	Bleaching and dyeing	1,525	13	78	Metal-forging	732
22	9	Boats	1,216	3	92	Metal-founding	2,310
5	11	Book-binding	2,566	3	75	Metallurgy	4,685
11	12	Boots and shoes	9,348	14	201	Metal-ornamenting	120
21	13	Brakes and gins	1,264	14	79	Metal personal wear. Making	461
15	107	Bread, cracker, and lozenge making	764	14	164	Metal punching and shearing	1,056
4	14	Bridges	951	13	80	Metal-rolling	1,167
27	15	Brushing and scrubbing	3,184	13	76	Metal tools and implements. Making	2,686
20	16	Builders' hardware	7,792	13	134	Metal-tube manufacture	433
25	17	Butchering	978	13	82	Metal turning, planing, and milling	2,012
15	18	Caoutchouc and minor plastics	1,864	13	206	Metal-welding	535
32	209	Carbonating beverages	278	14	81	Metal-working tools	3,265
21	19	Carding	1,320	25	83	Mills	9,720
2	119	Care of live stock	3,089	31	196	Mineral oils	666
29	20	Carpentry	3,717	5	84	Music	3,928
10	21	Carriages and wagons	20,096	13	85	Nails and spikes	1,523
13	59	Chains, staples, and horseshoes	842	13	163	Needles and pins	175
8	155	Chairs	4,389	14	151	Nut and bolt locks	1,540
31	202	Charcoal and coke	178	31	87	Oils, fats, and glue	1,836
6	23	Chemicals	1,143	30	88	Optics	1,445
11	24	Clasps, buckles, and buttons	11,795	22	89	Ordnance	954
15	25	Clay and pottery	3,090	32	210	Packaging and dispensing liquids	1,262
21	26	Cloth-finishing	659	32	150	Packing and storing vessels	10,854
12	192	Clutches	1,535	31	91	Painting	2,043
3	96	Coating with metal	454	15	92	Paper-making	3,307
14	194	Coin-controlled apparatus	818	17	93	Paper-manufactures	3,381
15	154	Composite roofings and coverings	665	15	94	Paving	1,090
12	193	Conveyers	1,167	6	95	Photography	1,481
29	147	Coopering	670	1	97	Plows	10,122
21	28	Cordage	1,549	28	98	Pneumatics	3,647
12	212	Cranes and derricks	596	6	99	Preserving	1,541
24	29	Crinoline and corsets	1,506	2	100	Pressee	3,798
8	156	Curtains, shades, and screens	2,435	17	101	Printing	5,833
13	30	Cutlery	2,103	22	102	Projectiles	2,076
2	31	Dairy	4,435	9	103	Pumps	4,240
20	32	Dentistry	1,283	34	128	Railway-brakes	2,667
24	165	Designs	697	34	213	Railway draft appliances	6,780
23	33	Drafting	2,481	34	105	Railway rolling-stock	5,827
28	34	Driers	793	4	104	Railways	8,334
31	35	Educational appliances	2,058	28	62	Refrigeration	3,408
26	173	Electricity. Conductors	1,751	29	108	Roofing	1,182
26	191	Electricity. Electric railways	2,927	1	111	Safes	490
26	171	Electricity. Generation	393	9	182	Seeders and planters	7,477
26	174	Electricity. Medical and surgical	1,061	24	112	Sewerage	281
26	172	Electricity. Motive-power	493	3	207	Sewing-machines	6,048
16	175	Electricity. Special applications	3,346	113	113	Shaping fluid metal	235
16	176	Electric lighting	1,781	22	114	Sheet-metal ware. Making	2,266
16	177	Electric signaling	2,963	22	116	Ships	2,743
3	204	Electro-chemistry	1,639	21	117	Signals	2,662
12	187	Elevators	2,165	21	118	Silk	106
4	37	Excavating	500	5	120	Spinning	2,298
6	52	Explosives	1,234	18	130	Stationery	4,532
14	168	Farriery	771	18	122	Steam and vacuum pumps	227
21	38	Felt and fur	6,807	18	110	Steam-boilers	5,883
1	39	Fences	424	18	131	Steam-boiler furnaces	2,947
6	71	Fertilizers	1,500	18	132	Steam-engines	8,237
5	41	Fine arts	4,356	18	136	Steam-engine valves	2,465
22	42	Firearms	2,487	25	125	Stone-working	2,188
4	159	Fire escapes and ladders	1,023	8	211	Store furniture	1,323
9	169	Fire-extinguishers	455	12	186	Store service	690
4	183	Fireproof buildings	2,667	19	126	Stoves and furnaces	18,340
22	43	Fishing and trapping	802	6	127	Sugar and salt	2,401
31	50	Fluid-pressure regulators	636	6	128	Surgery	3,335
15	44	Fuel	4,854	16	178	Telegraphy	3,075
8	45	Furniture	4,453	16	179	Telephony	2,297
7	46	Games and toys	3,060	25	130	Threshing	4,130
31	48	Gas	1,351	2	131	Tobacco	2,274
15	49	Glass	2,598	24	132	Toilet	826
27	51	Grinding and polishing	1,395	4	200	Towers	473
13	53	Hardware-making	7,400	1	47	Trees, plants, and flowers	924
11	54	Harness	4,691	30	197	Type-writing machines	1,112
1	55	Harrowes and diggers	10,155	24	135	Umbrellas and canes	947
31	149	Hides, skins, and leather	1,091	20	27	Undertaking	630
12	57	Hoisting	5,558	25	146	Vegetable cutters and crushers	2,005
23	58	Horology	3,640	7	208	Velocipedes	2,388
11	60	Hose and belting	1,002	13	152	Wagon, car, and track irons	1,074
4	61	Hydraulic engineering	1,446	27	141	Washing apparatus	652
9	138	Hydraulic motors	2,572	9	137	Water-distribution	7,707
18	162	Injectors and ejectors	540	21	139	Weaving	3,732
4	189	Iron structures	524	19	157	Wheelwright-machines	310
5	63	Jewelry	1,106	28	170	Wind-wheels	1,485
12	64	Journal-boxes, pulleys, and shafting	4,352	14	140	Wire-working	1,449
8	65	Kitchen and table articles	1,747	29	143	Wood-sawing	4,209
21	66	Knitting and netting	1,580	29	142	Wood-turning	756
30	67	Lamps and gas-fittings	8,211	29	144	Wood-working machines	5,524
				29	145	Wood-working tools	4,235

# CLASSES NUMERICALLY ARRANGED.

No.	Class.	Div.	No.	Class.	Div.
2	Apparel.....	24	107	Bread, cracker, and lozenge making.....	15
3	Artificial limbs.....	20	108	Roofing.....	29
4	Baths and closets.....	9	109	Safes.....	20
5	Beds.....	8	110	Steam-boiler furnaces.....	18
6	Bee-culture.....	2	111	Seeders and planters.....	1
8	Bleaching and dyeing.....	6	112	Sewing-machines.....	24
9	Boats.....	22	113	Sheet-metal ware. Making.....	14
10	Metal bolts, nuts, rivets, and screws.....	13	114	Ships.....	22
11	Book-binding.....	5	115	Marine propulsion.....	22
12	Boots and shoes.....	11	116	Signals.....	22
13	Brakes and gins.....	21	117	Silk.....	21
14	Bridges.....	4	118	Spinning.....	21
15	Brushing and scrubbing.....	27	119	Care of live stock.....	2
16	Builders' hardware.....	20	120	Stationery.....	5
17	Butchering.....	25	121	Steam-engines.....	18
18	Caoutchouc and minor plastics.....	15	122	Steam-boilers.....	18
19	Carding.....	21	123	Air and gas engines.....	23
20	Carpentry.....	29	125	Stone-working.....	25
21	Carriages and wagons.....	10	126	Stoves and furnaces.....	19
22	Metal-founding.....	3	127	Sugar and salt.....	6
23	Chemicals.....	6	128	Surgery.....	25
24	Clasps, buckles, and buttons.....	11	130	Thrashing.....	25
25	Clay and pottery.....	15	131	Tobacco.....	2
26	Cloth-finishing.....	21	132	Toilet.....	24
27	Undertaking.....	20	134	Metal-tube manufacture.....	3
28	Cordage.....	21	135	Umbrellas and canes.....	24
29	Crinoline and corsets.....	24	136	Steam-engine valves.....	18
30	Cutlery.....	13	137	Water-distribution.....	9
31	Dairy.....	2	138	Hydraulic motors.....	9
32	Dentistry.....	20	139	Weaving.....	21
33	Drafting.....	23	140	Wire-working.....	14
34	Driers.....	28	141	Washing apparatus.....	27
35	Educational appliances.....	31	142	Wood-turning.....	29
37	Excavating.....	4	143	Wood-sawing.....	29
38	Felt and fur.....	21	144	Wood-working machines.....	29
39	Fences.....	1	145	Wood-working tools.....	25
40	Advertising.....	32	146	Vegetable cutters and crushers.....	29
41	Fine arts.....	5	147	Coopering.....	29
42	Firearms.....	22	148	Annealing and tempering.....	3
43	Fishing and trapping.....	22	149	Hides, skins, and leather.....	31
44	Fuel.....	15	150	Packing and storing vessels.....	32
45	Furniture.....	8	151	Nut and bolt locks.....	14
46	Games and toys.....	7	152	Wagon, car, and track irons.....	13
47	Trees, plants, and flowers.....	1	153	Metal-bending.....	14
48	Gas.....	31	154	Composite roofings and coverings.....	15
49	Glass.....	15	155	Chairs.....	8
50	Fluid-pressure regulators.....	31	156	Curtains, shades, and screens.....	8
51	Grinding and polishing.....	27	157	Wheelwright-machines.....	29
52	Explosives.....	6	159	Fire escapes and ladders.....	4
53	Hardware-making.....	13	160	Steam and vacuum pumps.....	18
54	Harness.....	11	162	Injectors and ejectors.....	18
55	Harrows and diggers.....	1	163	Needles and pins.....	13
56	Harvesters.....	7	164	Metal punching and shearing.....	14
57	Hoisting.....	12	165	DESIGNS.....	24
58	Horology.....	23	166	Artesian and oil wells.....	25
59	Chains, staples, and horseshoes.....	13	167	Medicines.....	6
60	Hose and belting.....	11	168	Farriery.....	14
61	Hydraulic engineering.....	4	169	Fire-extinguishers.....	9
62	Refrigeration.....	28	170	Wind-wheels.....	28
63	Jewelry.....	5	171	Electricity. Generation.....	26
64	Journal-boxes, pulleys, and shafting.....	12	172	Electricity. Motive-power.....	26
65	Kitchen and table articles.....	8	173	Electricity. Conductors.....	26
66	Knitting and netting.....	31	174	Electricity. Medical and surgical.....	26
67	Lamps and gas-fittings.....	20	175	Electricity. Special applications.....	16
68	Laundry.....	27	176	Electric lighting.....	16
69	Leather-working machinery.....	11	177	Electric signaling.....	16
70	Locks and latches.....	20	178	Telegraphy.....	16
71	Fertilizers.....	6	179	Telephony.....	32
72	Masonry.....	4	180	Accouterments.....	23
73	Measuring-instruments.....	23	181	Acoustics.....	9
74	Machine elements.....	12	182	Sewerage.....	4
75	Metallurgy.....	3	183	Fireproof buildings.....	2
76	Metal tools and implements. Making.....	13	184	Lubricators.....	12
77	Metal boring and drilling.....	13	185	Mechanical motors.....	12
78	Metal-forging.....	13	186	Store service.....	34
79	Metal personal wear. Making.....	14	187	Elevators.....	4
80	Metal-rolling.....	13	188	Railway-brakes.....	30
81	Metal-working tools.....	14	189	Iron structures.....	32
82	Metal turning, planing, and milling.....	13	190	Baggage.....	26
83	Mills.....	25	191	Electricity. Electric railways.....	12
84	Music.....	5	192	Clutches.....	12
85	Nails and spikes.....	13	193	Conveyers.....	14
86	Arms and projectiles. Making.....	13	194	Coin-controlled apparatus.....	31
87	Oils, fats, and glue.....	31	195	Alcohol.....	31
88	Optics.....	30	196	Mineral oils.....	31
89	Ordnance.....	22	197	Type-writing machines.....	30
91	Painting.....	31	198	Matrix-making.....	30
92	Paper-making.....	15	199	Linotyping.....	30
93	Paper-manufactures.....	17	200	Towers.....	4
94	Paving.....	15	201	Metal-ornamenting.....	14
95	Photography.....	6	202	Charcoal and coke.....	31
96	Coating with metal.....	3	203	Ammonia, water, and wood distillation.....	31
97	Plows.....	1	204	Electro-chemistry.....	3
98	Pneumatics.....	28	205	Metal-drawing.....	3
99	Preserving.....	6	206	Metal-welding.....	3
100	Presses.....	2	207	Shaping fluid metal.....	3
101	Printing.....	17	208	Velocipedes.....	7
102	Projectiles.....	22	209	Carbonating beverages.....	32
103	Pumps.....	9	210	Packaging and dispensing liquids.....	32
104	Railways.....	4	211	Store furniture.....	8
105	Railway rolling-stock.....	34	212	Cranes and derricks.....	12
106	Artificial stone, lime, and cement.....	15	213	Railway draft appliances.....	34



# DIVISION I.

EXAMINER FOX.

CLASSES.—39, Fences; 55, Harrows and Diggers; 97, Plows; 111, Seeders and Planters; 47, Trees, Plants, and Flowers.

## CLASS 39.—FENCES. (1.)

Sub-classes.	
Fences—	Gates—
1. Barbed—	92. Openers—
70. Linked,	93. Car-door,
102. Ribbon,	93. Car-platform door,
71. Visible,	96. Hatch,
64. Cat-guards,	94. Sliding door,
65. Earth and plastic,	95. Swinging door,
4. Flood,	97. Window,
6. Iron,	23. Oscillating,
9. Wire—	11. Railway—
72. Fabric,	42. Cattle-guard,
12. Fasteners—	38. Electric,
76. Clamps,	36. Mast—
77. Hook-nails and staples,	35. Automatic,
73. Picket,	41. Platform-guard,
74. Stays—	37. Pneumatic,
78. Linked,	39. Rocking,
79. Lock-plates,	44. Sliding,
75. Strands,	43. Swinging,
45. Stretchers, Permanent—	40. Vertically-moving,
46. Compensators,	7. Sliding—
47. Mid-wire-take-ups,	29. Lever-openers,
48. Path-closers,	28. Pulley or rack openers,
49. Post-winders—	30. Suspended,
50. Vertical,	31. Vibrating tracks,
51. Stretchers, Removable—	32. Sliding and swinging—
52. Clutch-bars,	33. Hinged-roller,
53. Grips,	34. Suspending frames,
54. Levers—	8. Swinging—
55. Attached,	18. Folding-panel,
56. Leopers,	14. Hand-openers,
57. Rack-bars,	20. Load-openers,
58. Ratchet-bars,	17. Rotary,
59. Reel-carriers,	16. Self-closers,
63. Screw,	25. Tilting,
60. Tongs,	19. Vertically-adjustable,
61. Twin-hooks,	13. Tilting—
62. Windlasses,	26. Folding-panel,
66. Wood—	99. Turnstiles,
80. Panel—	100. Wire gates,
83. Suspended,	101. Wire gates, frameless.
84. Worm,	Posts—
81. Picket—	Bases—
85. Panel,	86. Metal,
82. Tied,	87. Plastic,
5. Gates—	88. Wood,
15. Compound,	Braces—
24. Dropping,	89. Lateral,
21. Expanding,	90. Longitudinal,
98. Fire-guards,	67. Metal,
22. Jump,	68. Plastic,
Openers—	69. Wood,
91. Cab-door,	

## CLASS 55.—HARROWS AND DIGGERS. (1.)

Sub-classes.	
1. Clod-crushers—	4. Harrow-teeth—
21. Barred and corrugated rollers,	35. Spike,
22. Drag-bars,	36. Spring,
23. Drag bars and barrows,	37. Trailing and draw-cut,
24. Toothed rollers and wheels.	5. Hoes—
2. Forks—	38. Adjustable,
25. Adjustable heads,	39. Compound,
26. Combined forks and shovels,	40. Adjustable,
27. Fodder-forks,	41. Horizontal,
28. Potato forks and shovels.	42. Adjustable,
3. Harrows—	43. Interchangeable,
Changeable-form,	44. Toothed blades,
30. Disk,	45. Weeding,
31. Expandible,	6. Land-rollers—
32. Flexible,	46. Furrows and markers,
11. Revolving,	47. Pivoted,
13. Rotary,	48. Weighted cylinders,
33. Spring-tooth,	49. Weighted frames,
34. Tooth-cleaners,	7. Pivoted teeth,
19. Wheel—	8. Pivoted tooth-bars,
73. Disk,	9. Potato-diggers—
20. Rotary,	50. Bearing-wheel separators,
74. Spring,	51. Endless-carrier—
75. Trailing teeth.	52. Receptacles,
	54. Plow and screen,
	53. Plow-clearers,
	55. Plow, vibrating screens,

## CLASS 55.—Continued.

Potato-diggers—	Stalk-choppers—
57. Screen-cylinders,	64. Vine-cutters.
56. Sifting-wheels, side-delivery,	65. Stalk-pullers, hand,
58. Spiral conveyers,	66. Wheel.
59. Toothed drum.	17. Stone-gatherers.
10. Rakes.	18. Transplanters—
12. Rollers and harrows.	67. Dibbles,
14. Shovels.	68. Pivoted jaws,
15. Stalk-choppers—	70. Post-hole diggers,
60. Draw-cut,	71. Post-hole diggers, pivoted jaws,
63. Reciprocating,	69. Sliding jaws,
61. Revolving, horizontal,	72. Wheel-machines.
62. Vertical,	

## CLASS 97.—PLOWS. (1.)

Sub-classes.	
1. Attachments—	11. Cultivator-teeth.
44. Harrow.	13. Fenders.
2. Beams.	14. Gage wheels and runners.
3. Cleaners.	15. Handles.
4. Clevises.	17. Landsides.
6. Colters—	18. Mold boards—
43. Rolling.	23. Revolving.
5. Corn-coverers.	21. Plows—
8. Cotton-choppers.	12. Ditching,
9. Cotton-scrapers.	19. Mole,
7. Couplings.	40. Revolving.
10. Cultivators—	26. Shovel,
41. Hand—	27. Side-hill,
42. Wheel,	30. Steam,
20. Parallel,	36. Wheel.
37. Revolving,	22. Points.
38. Rolling,	24. Ridgers.
25. Rotary—	28. Sod-cutters.
39. Horizontal,	29. Standards.
31. Straddle-row,	32. Subsoilers.
34. Wheel—	33. Weed-turners.
35. Straddle-row,	

## CLASS 111.—SEEDERS AND PLANTERS. (1.)

Sub-classes.	
1. Broadcast—	19. Grain-drill cleaners.
2. Hand,	24. Land-markers.
3. Revolving hoppers,	25. Pivoted seed-cups.
4. Walking.	Planters—
5. Check-row.	6. Corn,
8. Cups on belt.	7. Cotton,
9. Cups on disk.	16. Foot,
Drills—	20. Hand—
35. Adjustable rank,	21. Oscillating,
18. Grain,	22. Reciprocating,
36. Walking,	23. Rotating,
10. Drills and broadcast combined.	27. Potato—
11. Drill-teeth.	28. Walking,
12. Elastic feed-wheels.	32. Walking—
34. Fertilizer-distributers—	33. Vibrating hoppers.
13. Hand,	26. Plungers.
14. Revolving hoppers,	29. Preparing seed.
15. Walking.	37. Rolling hoppers.
17. Force-feed.	31. Screw-feed.

## CLASS 47.—TREES, PLANTS, AND FLOWERS. (1.)

Sub-classes.	
15. Blanching.	28. Root-guards.
16. Dress attachments.	29. Sap-buckets.
17. False stems.	11. Sap-spouts.
18. Flower-holders.	30. Seed-testers.
19. Flower-pots.	31. Stays and props.
20. Flower-work.	32. Strawberry-growing.
21. Garden-beds.	33. Tree-covering.
6. Grafting.	34. Transplanting-pots.
22. Hand-screens.	35. Trap-belts.
23. Hanging baskets.	36. Treatment—
13. Hedge-training.	37. Implements.
7. Hep-culture.	12. Trellises.
24. Lawn-vases.	38. Trunk-guards, cattle—
27. Plant frames and houses.	39. Vermin.
25. Plant-stands—	40. Turpentine-gathering.
26. Revolving.	41. Window-gardens.

# DIVISION II.

EXAMINER I. U. TOWNSEND.

CLASSES.—6, Bee-Culture; 119, Care of Live Stock; 31, Dairy; 184, Lubricators; 185, Mechanical Motors; 100, Presses; 131, Tobacco.

## CLASS 6.—BEE-CULTURE. (II.)

### Sub-classes.

- |               |                     |
|---------------|---------------------|
| 1. Bee-hives. | 2. Hive appliances. |
|---------------|---------------------|

## CLASS 119.—CARE OF LIVE STOCK. (II.)

### Sub-classes.

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| Animal-stocks—                    | 5. Poultry-culture.             |
| 14. Hog-traps,                    | 19. Sheep-protectors.           |
| 15. Horse and cattle,             | 9. Stanchions.                  |
| 16. Sheep.                        | Steading and feeding—           |
| 46. Bird cages and houses.        | 20. Calf-feeders,               |
| 17. Catching and holding tools.   | 21. Combined troughs and racks, |
| 48. Currycombs.                   | 22. Feed-racks,                 |
| 47. Gags and muzzles.             | 23. Feed-troughs,               |
| 18. Gangways.                     | 52. Nose-bags,                  |
| 3. Grooming.                      | 24. Releasing devices,          |
| 49. Hitching-posts and ties.      | 35. Stall-floors,               |
| 51. Hopples.                      | 26. Stalls, sheds, and pens.    |
| 4. Incubators.                    | 53. Stock-cars.                 |
| 54. Manure-ponches.               | 27. Stock-sorters.              |
| 13. Nose-rings and ringing-tools. | 50. Tethers.                    |
| 12. Pokes.                        |                                 |

## CLASS 31.—DAIRY. (II.)

### Sub-classes.

- |   |                             |
|---|-----------------------------|
| Butter and cheese—                      | Churns—                     |
| 24. Cutters,                            | 42. Rotary—                 |
| 23. Manufacture of.                     | Vertical single-dasher,     |
| 25. Butter workers and molds.           | Vertical double-dasher—     |
| 20. Centrifugal creamers.               | 43. Concentric shafts,      |
| 21. Cheese-hoops.                       | 44. Parallel shafts,        |
| 26. Cheese-turners.                     | 17. Vibrating,              |
| 22. Cheese-vats and curd-breakers.      | 18. Working body.           |
| 7. Churns—                              | 8. Cow-milkers.             |
| 9. Double-acting,                       | 27. Cream-pumps.            |
| Reciprocating,                          | 63. Drink-mixers.           |
| Crank mechanism—                        | 57. Egg-beaters—            |
| Multiple-dasher,                        | 61. Reciprocating,          |
| 30. Single-dasher,                      | 59. Rotary multiple-dasher— |
| 31. Combined lever and crank mechanism, | 58. Single-dasher,          |
| 32. Foot mechanism,                     | 60. Vibrating.              |
| 33. Hand and foot mechanism,            | Milk-coolers—               |
| Lever mechanism—                        | 45. Aerating,               |
| Multiple-dasher,                        | 46. Creaming-cans—          |
| 35. Single-dasher,                      | 47. Agitators,              |
| 36. Rocking-seat mechanism,             | 48. Depending-tube,         |
| 37. Without operating mechanism,        | 49. Floats,                 |
| Rotary—                                 | 50. Vacuum creamers,        |
| Diagonal-dasher,                        | 51. Vertical-tube,          |
| 39. Horizontal single-dasher,           | 52. Milk-circulation,       |
| Horizontal double-dasher—               | 53. Vats—                   |
| 40. Concentric shafts,                  | 54. Air-circulation,        |
| 41. Parallel shafts,                    | 55. Horizontal-tube,        |
|   | 56. Removable-pipe.         |
|   | 13. Milk-stools.            |
|   | 14. Pails and strainers.    |
|   | 28. Tables and racks.       |

## CLASS 184.—LUBRICATORS. (II.)

### Sub-classes.

- |                               |                       |
|-------------------------------|-----------------------|
| 1. Capillary attraction.      | 4. Gravity-feed—      |
| 2. Condensation displacement. | 5. Automatic cut-off. |
| 3. Force-feed.                | 6. Liquefiers.        |
|                               | 8. Miscellaneous.     |

## CLASS 185.—MECHANICAL MOTORS. (II.)

### Sub-classes.

- |                  |                   |
|------------------|-------------------|
| 1. Horse-powers— | 5. Miscellaneous. |
| 2. Equalizers,   | 6. Spring.        |
| 3. Treads.       | 7. Weight.        |
| 4. Manual.       |                   |

## CLASS 100.—PRESSES. (II.)

### Sub-classes.

- |  |                                    |
|--|------------------------------------|
| Baling—                                  | Copying—                           |
| 1. Belt and roller.                      | 39. Fluid-pressure,                |
| Plunger—                                 | 60. Hand-impressing,               |
| 2. Cam,                                  | 61. Hand-impressing, book-flexure, |
| 3. Crank and pitman,                     | 62. Roller mechanism.              |
| 4. Lever,                                | Expressing—                        |
| 5. Rack bar and pinion,                  | 35. Belt,                          |
| 6. Ratchet and grapple bar,              | 36. Belt and plunger,              |
| 7. Rebounding,                           | 37. Belt and roller,               |
| 8. Screw,                                | 38. Disk.                          |
| 9. Toggle-joint,                         | Plunger—                           |
| 10. Toggle-joint, inverted,              | 39. Cam,                           |
| 11. Thrust-bar,                          | 40. Crank and pitman,              |
| 12. Windlass.                            | 41. Lever,                         |
| 13. Screw.                               | 42. Rack bar and pinion,           |
| Articles and attachments—                | 43. Ratchet and grapple bar,       |
| 14. Bales and bale-covers,               | 44. Screw,                         |
| 15. Bale-band tighteners,                | 45. Toggle-joint,                  |
| 16. Bale-ejectors,                       | 46. Windlass.                      |
| 20. Binders,                             | 47. Roller.                        |
| 19. Boxes and frames,                    | 48. Screw.                         |
| 21. Brakes,                              | 49. Without operating mechanism.   |
| 22. Condensers,                          | Articles and attachments—          |
| 23. Discharge-end contracting devices,   | 50. Boxes and frames,              |
| 24. Division-blocks and block-inserters, | 51. Cake-formers,                  |
| 25. Feeders,                             | 52. Cake-strippers,                |
| 27. Indicators,                          | 53. Cake-trimmers,                 |
| 28. Movable bale-boxes,                  | 54. Mats.                          |
| 29. Plungers,                            | Packing—                           |
| 30. Retainers.                           | 55. Cheese,                        |
| Bundling—                                | 56. Continuous-compression,        |
| 31. In lengths,                          | 57. Single-compression,            |
| 32. In lengths, shingles,                | 58. Silos.                         |
| 33. Wool.                                |                                    |
| 34. Can-filling machines.                |                                    |

## CLASS 131.—TOBACCO. (II.)

### Sub-classes.

- |   |                                |
|---|--------------------------------|
| 37. Cigar and cigarette cutters.        | 60. Leaf-treating—             |
| 18. Cigar-bundling.                     | 56. Booking.                   |
| 38. Cigar-cutters, tip.                 | 57. Stemming,                  |
| 5. Cigar-machines—                      | 58. Stem-crushing.             |
| 39. Adjuncts,                           | 30. Moistening.                |
| 40. Apron—                              | 9. Molding cigars.             |
| 41. Moving rolling-table,               | 10. Mouthpieces.               |
| 42. Stationary rolling-table,           | 11. Packing.                   |
| 43. Endwise-moving filler,              | 13. Pipe-cleaners.             |
| 44. One traveling apron,                | 12. Pipes and stems.           |
| 45. Roller,                             | 14. Plug-making.               |
| 46. Two traveling aprons.               | 15. Plugs.                     |
| 47. Cigar-machine aprons.               | 31. Smoking-tobacco.           |
| 48. Cigar-makers' implements—           | 22. Smoking-tubes.             |
| 49. Wrapper-cutters.                    | 16. Snuff manufacture.         |
| 20. Cigar-perforators.                  | Tobacco-cutters—               |
| 51. Cigar supports and stands.          | 23. Pivoted-knife,             |
| 52. Cigars, cigarettes, and cartridges. | 34. Reciprocating-knife,       |
| 6. Curing.                              | 35. Rotating-knife.            |
| 55. Dressing, casing, and flavoring.    | 21. Tobacco-hangers.           |
| 7. Granulating.                         | 59. Tobacco-users' appliances. |
|   | 36. Wrappers.                  |

# DIVISION III.

## EXAMINER BYRNES.

CLASSES.—148, Annealing and Tempering; 96, Coating with Metal; 204, Electro-Chemistry; 22, Metal-Founding; 75, Metallurgy; 207, Shaping Fluid Metal.

### CLASS 148.—ANNEALING AND TEMPERING. (III.)

#### Sub-classes.

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| 13. Annealing apparatus—            | Glass-annealing—                 |
| 14. Boxes and pots,                 | 28. Flattening-tables,           |
| 15. Clamps,                         | 29. Hearths,                     |
| 16. Muffles,                        | 30. Leers—                       |
| 17. Ovens—                          | 31. Grids,                       |
| 18. Rotary hearths,                 | 32. Muffles,                     |
| 19. Pits,                           | 33. Processes.                   |
| 20. Wire and springs.               | 34. Hardening apparatus—         |
| 21. Annealing processes—            | 35. Bands and wire,              |
| 22. Drawing temper,                 | 36. Clamps.                      |
| 23. Gas,                            | 37. Hardening processes—         |
| 24. Toughening.                     | 39. Molten metal,                |
| 40. Cementation and case-hardening— | 38. Solutions.                   |
| 25. Compounds,                      | Tempering and annealing—         |
| 26. Gaseous,                        | 10. Applications of electricity, |
| 27. Liquid.                         | 12. Metals other than iron.      |
| 8. Decarbonizing.                   |                                  |

### CLASS 96.—COATING WITH METAL. (III.)

#### Sub-classes.

- |                            |                   |
|----------------------------|-------------------|
| 2. Galvanizing.            | 8. Precipitating. |
| 9. Iron oxides.            | 7. Tinning.       |
| 11. Pickling and swilling. | 10. Wipers.       |

### CLASS 204.—ELECTRO-CHEMISTRY. (III.)

#### Sub-classes.

- |                            |                           |
|----------------------------|---------------------------|
| <b>Batteries—</b>          | <b>Electrolysis—</b>      |
| 49. Anodes,                | Aqueous bath—             |
| 50. Cathodes,              | 5. Apparatus,             |
| 52. Connectors,            | 6. Cathodes—              |
| 51. Diaphragms,            | 7. Cleaning,              |
| 47. Earth,                 | 8. Metallizing,           |
| 48. Gas,                   | 9. Chemicals,             |
| One-fluid—                 | 10. Copper,               |
| 34. Zinc—                  | 11. Depolarizing and bur- |
| 35. Nitrates,              | nishing,                  |
| 36. Sulphates,             | 12. Gold,                 |
| 37. Chromates,             | 13. Multiple,             |
| 38. Oxides,                | 14. Nickel,               |
| 39. Chlorides,             | 15. Ores,                 |
| 40. Two-fluid—             | 16. Silver,               |
| 41. Zinc—                  | 17. Tin,                  |
| 42. Nitrates,              | 18. Zinc.                 |
| 43. Sulphates—             | 22. Bleaching,            |
| 44. Gravity,               | 24. Diaphragms,           |
| 45. Chromates,             | 19. Fused bath—           |
| 46. Piles,                 | 20. Aluminium,            |
| 29. Secondary—             | 21. Sodium,               |
| 30. Charging and discharg- | 24. Purifying liquids—    |
| ing,                       | 26. Alcohol,              |
| 53. Vessels.               | 25. Water,                |
| <b>Electrolysis—</b>       | 27. Tanning.              |
| 1. Aqueous bath—           | <b>Synthesis—</b>         |
| 2. Alloys,                 | 31. Synthesis—            |
| 3. Aluminium,              | 32. Ozone.                |
| 4. Anodes,                 |                           |

### CLASS 22.—METAL-FOUNDING. (III.)

#### Sub-classes.

- |                                |                                 |
|--------------------------------|---------------------------------|
| <b>Metal molds—</b>            | <b>Metal molds—</b>             |
| 1. Apparatus and plants,       | 50. Tools.                      |
| 2. Chains, hinges, and joints, | 23. Vehicle-wheels.             |
| 4. Hardware,                   | 24. Wheels.                     |
| 5. Hollow ware.                | 25. Chains, hinges, and joints, |
| 7. Ingots—                     | 26. Hardware,                   |
| 6. Compound,                   | 27. Hollow ware,                |
| 6. Hollow and tube,            | <b>Molded molds—</b>            |
| 10. Plants,                    | 28. Molded molds.               |
| 53. Strippers.                 | 8. Molders' flasks.             |
| 52. Ladles.                    | 29. Materials.                  |
| 11. Materials.                 | 17. Tools and arts.             |
| 12. Ordnance and projectiles.  | 30. Ordnance and projectiles.   |
| 13. Pigs.                      | 31. Pipes—                      |
| 14. Plows.                     | 32. Horizontal.                 |
| 15. Rolls.                     | 3. Pipe-elbows.                 |
| 18. Screw-threads.             | 33. Plants.                     |
| 16. Soft-metal machines—       | 34. Plows.                      |
| 21. Molds,                     | 35. Rolls.                      |
| 19. Shot,                      | 36. Screw-threads.              |
| 20. Spoons,                    | 37. Tools.                      |
| 22. Traps,                     | 38. Vehicle-wheels.             |
| 51. Type.                      | 39. Wheels.                     |

### CLASS 22.—Continued.

#### Molding Apparatus—

40. Blacking-molds,  
41. Hollow ware,  
42. Machines,  
43. Ordnance and projectiles.  
44. Pipes—  
45. Horizontal.

#### Molding apparatus—

46. Pipe-cores.  
47. Screw-threads.  
48. Vehicle-wheels.  
49. Wheels.  
**Rotary molds—**  
50. Rotary molds.

### CLASS 75.—METALLURGY. (III.)

#### Sub-classes.

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Alloys.                    | 22. Quicksilver.              |
| 2. Assaying.                  | 17. Reducing and separating—  |
| 90. Blowpipes.                | 58. Aluminium,                |
| 3. Converters—                | 57. Apparatus,                |
| 148. Fixed,                   | 62. Copper,                   |
| 149. Furnace,                 | 59. Desilverizing lead,       |
| 150. Runway,                  | 60. Desulphurizing ores,      |
| 151. Sectional,               | 61. Disintegrating ores,      |
| 152. Tuyeres and bottoms.     | 63. Flux,                     |
| 182. Crucibles.               | 64. Gold and silver,          |
| 107. Cnpolas—                 | 85. Manganese,                |
| 108. Drop-bottoms,            | 66. Nickel and cobalt,        |
| 109. Fore-hearths,            | 65. Ore bricks,               |
| 110. Water-jackets,           | 183. Sodium.                  |
| 111. Wind-chests and tuyeres. | <b>Regenerators—</b>          |
| 112. Finery-fires.            | 95. Double-surface,           |
| 113. Fire-brick.              | 94. Single-surface.           |
| 30. Fume-arresters.           | <b>Roasters—</b>              |
| <b>Furnaces—</b>              | 133. Blasting,                |
| 40. Blank—                    | 134. Hearths—                 |
| 184. Tire,                    | 135. Rotary,                  |
| 5. Blast—                     | 136. Kilns,                   |
| 114. Charging devices—        | 137. Muffles,                 |
| 115. Bell and hopper,         | Revolving—                    |
| 116. Protecting walls,        | 138. Cylinders,               |
| 97. Tuyeres,                  | 139. Retorts,                 |
| 117. Tymps and slag-spouts,   | 140. Shaft-and-shelf,         |
| 27. Crucible,                 | Stirrers—                     |
| 178. Electric,                | 141. Endless-chain,           |
| 180. Forge—                   | 142. Reciprocating,           |
| 181. Tuyeres,                 | 143. Rotary,                  |
| 84. Melting—                  | 144. Screw.                   |
| 89. Glass-pots,               | 25. Roasting and smelting     |
| 156. Glory-hole,              | hearth.                       |
| 119. Open-hearth,             | 145. Slag—                    |
| 92. Pot-hearth,               | 146. Disintegrating,          |
| 93. Tank,                     | 91. Heaters.                  |
| 19. Pigment,                  | 147. Separators, centrifugal. |
| Reverberatory—                | 18. Solution and precipita-   |
| 121. Heating air,             | tion—                         |
| 122. Necks and chimneys,      | 86. Apparatus,                |
| 123. Water-walls and roofs.   | 67. Chlorination,             |
| <b>Hot-blast ovens—</b>       | 185. Cyanides,                |
| 53. Double-surface,           | 69. Ferric salts,             |
| 52. Single-surface.           | 60. Parting bullion.          |
| 124. Hot-blast valves.        | 28. Spelter—                  |
| 14. Iron and steel direct—    | 153. Processes,               |
| 71. Apparatus,                | 154. Retorts,                 |
| 73. Bricks,                   | 155. Stacks.                  |
| 74. Flux,                     | 27. Treating molten iron—     |
| 75. Gases,                    | 44. Air, steam, and gases,    |
| 72. Retorts and hearths,      | 45. Alloys,                   |
| 76. Slag,                     | 46. Basic,                    |
| 77. Sponge.                   | 87. Basic linings,            |
| 15. Lead.                     | 47. Granulating,              |
| 127. Mechanical puddlers—     | 48. Oxides,                   |
| 128. Rotary hearths,          | 49. Physic,                   |
| 129. Tools.                   | 50. Scrap,                    |
| 130. Puddling-hearths—        | 51. Vacuum.                   |
| 131. Chills and bottoms,      | 55. Utilizing tin-scrap—      |
| 132. Doors and hits.          | 56. Wet processes.            |

### CLASS 207.—SHAPING FLUID METAL. (III.)

#### Sub-classes.

- |                     |                       |
|---------------------|-----------------------|
| 8. Granulating.     | Shaping, by dies—     |
| 1. Shaping.         | 3. Tubes—             |
| Shaping, by dies—   | 4. Compound,          |
| 2. Bars and plates, | 5. Curved.            |
| 6. Covering wire,   | 7. Shaping, by rolls. |

# DIVISION IV.

## EXAMINER POND.

CLASSES.—14, Bridges; 37, Excavating; 159, Fire Escapes and Ladders; 183, Fireproof Buildings; 61, Hydraulic Engineering; 189, Iron Structures; 72, Masonry; 104, Railways; 200, Towers.

### CLASS 14.—BRIDGES. (IV.)

#### Sub-classes.

- |                |                  |
|----------------|------------------|
| Bridges—       | Bridges—         |
| 7. Arch,       | 8. Floating,     |
| 12. Bowstring, | 5. Suspension,   |
| 1. Draw—       | 6. Truss.        |
| 13. Bascule,   | 2. Ferry-guards. |
| 9. Gates,      | 11. Flooring.    |
| 14. Lift,      | 4. Piers.        |
| 15. Swing,     |                  |

### CLASS 37.—EXCAVATING. (IV.)

#### Sub-classes.

- |                         |                           |
|-------------------------|---------------------------|
| 11. Diggers.            | Excavators—               |
| Dredgers—               | 17. Wheel—                |
| 18. Anchoring,          | 28. And belt,             |
| 14. Clamshell—          | 29. And carrier.          |
| 30. Buckets,            | 39. Miscellaneous.        |
| 13. Scouring—           | 43. Road beds and grades. |
| 36. Hydraulic.          | 40. Scoops—               |
| Excavators—             | 41. Railway-side.         |
| 24. Chain and bucket—   | 5. Scrapers—              |
| 23. Buckets,            | 19. Distant power,        |
| 16. Dipper,             | 22. Railway-side,         |
| 9. Hydraulic,           | 42. Sledged,              |
| 46. Pipe-supports,      | 7. Wheeled.               |
| 44. Steam vacuum,       | 6. Self-loading carts—    |
| 45. Suction-pipe mouth- | 32. Carrier,              |
| pieces,                 | 33. Scoop,                |
| 25. Plow and carrier,   | 34. Wheel.                |
| 10. Rammers,            | 35. Snow-row machines.    |
| 26. Screw—              | 20. Treating quicksands.  |
| 27. And carrier,        |                           |

### CLASS 159.—FIRE ESCAPES AND LADDERS. (IV.)

#### Sub-classes.

- |                          |                         |
|--------------------------|-------------------------|
| 10. Bed-bottom.          | 8. Ladders—             |
| 11. Blanket.             | 49. Collapsible,        |
| Checks—                  | Escape—                 |
| 22. Escapement,          | 58. Balcony,            |
| 23. Fluid,               | 15. Fixed.              |
| 24. Fly,                 | 16. Mounting.           |
| 25. Governor.            | 17. Sectional hand.     |
| 1. Chutes.               | 19. Shooting and truck, |
| 4. Friction—             | 18. Trolley,            |
| 25. Hand-clamp,          | 50. Extension,          |
| 26. Jaw,                 | 51. Feet,               |
| 27. Jaw, set-screw,      | 3. Flexible—            |
| 29. Reel—                | 44. Reel,               |
| 39. End-thrust,          | 45. Sectional—          |
| 32. Jaw-brake,           | 46. Elevator,           |
| 33. Jaw-brake, tension,  | 47. Single-stile,       |
| 31. Strap-brake,         | 48. Trolley,            |
| 34. Shooting lines,      | 52. Hooks,              |
| 35. Tortuons,            | 57. Jacks,              |
| 36. Tortuons and jaw—    | 53. Sectional,          |
| 37. Set-screw,           | 7. Step—                |
| 38. Wheel-brake.         | 56. Store-service,      |
| 5. Hoists—               | 54. Stops,              |
| 39. Fixed guides,        | 55. Trussed.            |
| 40. Movable guides,      | 6. Lazy-tongs.          |
| 41. Pulley-block,        | 14. Sliding poles.      |
| 42. Reciprocating cages, | Towers—                 |
| 43. Shooting-spar,       | 13. Fixed,              |
| 9. Trolley.              | 12. Shooting.           |

### CLASS 183.—FIREPROOF BUILDINGS. (IV.)

#### Sub-classes.

- |                         |                         |
|-------------------------|-------------------------|
| Ceilings and floors—    | 4. Fireproof roofs.     |
| 10. Concrete,           | 8. Fire-shields.        |
| 11. Concrete and metal, | 5. Flooding.            |
| 12. Metal,              | 9. Shutters, fireproof. |
| 13. Protected wood,     | Sidings and partitions— |
| 14. Tile,               | 16. Concrete,           |
| 15. Tile and metal.     | 17. Tile.               |
| 2. Columns and timber.  |                         |

### CLASS 61.—HYDRAULIC ENGINEERING. (IV.)

#### Sub-classes.

- |                                      |                        |
|--------------------------------------|------------------------|
| 1. Aqueducts.                        | 32. Harbors.           |
| 19. Breakwaters.                     | 29. Jetties. Sectional |
| 2. Cable-laying.                     | 11. Marine ways.       |
| 3. Caissons—                         | 12. Mining.            |
| 20. Ship.                            | 13. Pile-drivers—      |
| 4. Canals—                           | 37. Jigs,              |
| 28. Gate-valves,                     | 38. Monkey,            |
| 27. Gates. Bear-trap—                | 39. Piston,            |
| 21. Lock.                            | 40. Swinging-hammer,   |
| 5. Chutes—                           | 41. Sinking.           |
| 33. Screens,                         | Piles—                 |
| 34. Water-power.                     | 42. Metallic.          |
| 23. Cribbing.                        | 43. Protected.         |
| 24. Dams and levees—                 | 30. Protecting shores. |
| 35. Cores,                           | 15. Tide-powers.       |
| 36. Mattresses.                      | 16. Tunnels—           |
| 22. Dams. Coffe—                     | 44. Excavators,        |
| 25. Sectional.                       | 45. Shields.           |
| 7. Diving-armor.                     | 17. Water-gates—       |
| 8. Docks.                            | 46. Sliding.           |
| 9. Drains.                           | 47. Swinging.          |
| 26. Forming and preserving channels. | 31. Wharves.           |

### CLASS 189.—IRON STRUCTURES. (IV.)

#### Sub-classes.

- |              |                      |
|--------------|----------------------|
| 1. Building. | 7. Lathing-wire.     |
| 5. Doors.    | 11. Metal sheathing. |
| 2. Grilles.  | 9. Shutters.         |
| 3. Jails.    | 10. Windows.         |
| 6. Lathing.  |                      |

### CLASS 72.—MASONRY. (IV.)

#### Sub-classes.

- |                                 |                              |
|---------------------------------|------------------------------|
| 19. Apartment-houses.           | 11. Coping.                  |
| 26. Ash-chutes.                 | 6. Facing walls.             |
| 10. Bonding and tying.          | 17. Foundations.             |
| 13. Cellars.                    | 18. Hollow tile walls.       |
| 2. Centering.                   | 19. Smoke and air flues.     |
| 12. Cisterns.                   | 20. Stone and brick setting. |
| 4. Composite walls.             | 21. Subways.                 |
| 25. Construction. Miscellaneous | 23. Tile and metal floors.   |
|                                 | 22. Timber-seats.            |

# DIVISION IV.--CONTINUED.

## CLASS 104.--RAILWAYS. (IV.)

### Sub-classes.

- |                            |                          |
|----------------------------|--------------------------|
| 114. Bridge-guards.        | 22. Signals--            |
| 49. Buffers.               | 70. Switch.              |
| 1. Car-replacers.          | 70. Train-order.         |
| 2. Chairs.                 | 94. Signals. Automatic-- |
| 63. Compensators--         | 123. Agitated,           |
| 148. Intermittent-grip,    | 123. Block,              |
| 149. Slot,                 | 124. Croesing.           |
| 150. Weight.               | 72. Setting apparatus,   |
| 40. Crossings--            | 151. Stops,              |
| 116. Movable-rail--        | 73. Tappets,             |
| 117. Stub.                 | 74. Trips.               |
| 3. Deadening noise.        | 61. Sledways.            |
| 75. Deflection-stands.     | 95. Switch-chairs.       |
| 76. Detector-bars.         | 115. Switch-pieces.      |
| 4. Elevated--              | 96. Switch-rods.         |
| 131. Bicycle.              | 25. Switch-stands.       |
| 146. Cable rail.           | 12. Switches--           |
| 50. Foot-guards.           | 23. Automatic,           |
| 5. Frogs--                 | 77. Automatic safety,    |
| 99. Movable-rail--         | 127. Derailing,          |
| 118. Lap,                  | 125. Lap,                |
| 119. Stub,                 | 26. Pneumatic,           |
| 98. Spring-rail.           | 78. Safety,              |
| 35. Grippers--             | 152. Slip,               |
| 87. Automatic release,     | 79. Spring,              |
| 130. Coal-car,             | 126. Stub,               |
| 88. Friction,              | 24. Tramway--            |
| 89. Friction-belt,         | 128. Car devices,        |
| 132. Overstepping,         | 129. Track devices.      |
| 90. Roller,                | Track--                  |
| 91. Sprocket-wheel,        | 44. Fastenings,          |
| 92. Whelp-wheel.           | 14. Miscellaneous,       |
| 109. Guard-rail clamps.    | 45. Portable--           |
| 7. Hose-bridges.           | 112. Cross-overs.        |
| 8. Inclined plane--        | 46. Stringers and ties-- |
| 113. Traction.             | 55. Metallic.            |
| 39. Interlocking--         | Track-cleaners--         |
| 105. Rods,                 | 65. Blade and broom,     |
| 101. Selectors,            | 36. Centrifugal,         |
| 106. Stands--              | 37. Dumpers,             |
| 120. Catch,                | 38. Elevators,           |
| 121. Plunger.              | 56. Explosive,           |
| 133. Logging.              | 100. Flangers--          |
| 111. Pleasure-railways.    | 101. Rotary,             |
| 60. Pot-sleepers.          | 102. Vibrating,          |
| 134. Rack-rails.           | 103. Hot plows,          |
| 54. Rail-braces.           | 153. Oilers and washers, |
| Rail-joints--              | 51. Plows,               |
| 135. Boxes,                | 58. Removing weeds,      |
| 136. Bridge-pieces. Base-- | 66. Snow-guards,         |
| 137. Tread,                | 57. Stock-alarms,        |
| 138. Joint-chairs,         | 110. Track-curves.       |
| 145. Miscellaneous,        | 16. Track-layers.        |
| 139. Scarf,                | 17. Track-platforms.     |
| 140. Splice-bars--         | 59. Track-raisers.       |
| 141. Girder,               | 18. Traction--           |
| 143. Threadless bolts,     | 80. Cable-shields,       |
| 142. Truss,                | 81. Crossing conduits,   |
| 144. Web-blocks.           | 82. Crossing streams,    |
| 10. Rails--                | 83. Curves,              |
| 147. Compound.             | 53. Running and carrying |
| 21. Signals--              | rope,                    |
| 42. Automatic alarm,       | 84. Slot-closers,        |
| 67. Bar,                   | 85. Slot-switches,       |
| 71. Danger,                | 86. Take-ups,            |
| 31. Detonating,            | 47. Underground.         |
| 68. Light,                 | 48. Transfer-tables.     |
| 27. Pneumatic--            | 64. Truck-changers.      |
| 104. Automatic,            | 19. Turn-tables.         |
| 69. Portable,              | 62. Yards and plants.    |

## CLASS 200.--TOWERS. (IV.)

### Sub-classes.

- |                         |                     |
|-------------------------|---------------------|
| 1. Girders and columns. | 2. Skeleton.        |
| 4. Portable.            | 3. Telegraph-poles. |

# DIVISION V.

## EXAMINER LANE.

CLASSES.—11, Book-Binding; 41, Fine Arts; 63, Jewelry; 84, Music; 120, Stationery.

### CLASS 11.—BOOK-BINDING. (V.)

#### Sub-classes.

- |                                    |                                 |
|------------------------------------|---------------------------------|
| 1. Albums.                         | 7. Indexing—                    |
| 13. Bank-notes, checks, and bonds. | 21. Card catalogues.            |
| 16. Binding.                       | 19. Leaves.                     |
| 2. Binding-machines.               | 20. Leaves and covers.          |
| 17. Books and binding.             | 9. Newspaper-files.             |
| 3. Books and covers.               | 14. Postage and revenue stamps. |
| 4. Book-cover protectors.          | 10. Temporary binders.          |
| 5. Book-enttling.                  | 15. Tickets.                    |
| 12. Book-leafholders and marks.    | 11. Writing-tablets—            |
| 6. Book-stapling.                  | 22. Continuous,                 |
| 18. Covers.                        | 23. Manifoldling.               |

### CLASS 41.—FINE ARTS. (V.)

#### Sub-classes.

- |                         |                          |
|-------------------------|--------------------------|
| 2. Artificial flowers.  | 10. Gilding. Leaf-       |
| 1. Artists' appliances. | 12. Medals.              |
| 19. Badges.             | 21. Metal ornamentation. |
| 3. Banners and flags.   | 13. Ornamenting cloth.   |
| 4. Canvas-stretchers.   | 15. Pictures.            |
| 5. Decorative painting. | 14. Picture-frames.      |
| 6. Drawing-boards.      | 20. Picture-supports.    |
| 7. Easels.              | 16. Sculpture.           |
| 9. Engraving and tools. | 17. Theater appliances.  |
| 8. Engraving-machines.  | 18. Transfers.           |

### CLASS 63.—JEWELRY. (V.)

#### Sub-classes.

- |                  |   |
|------------------|---|
| 1. Bracelets.    | 11. Metal stock and ornamental wire fabric. |
| 2. Brooches.     | 7. Ornamental chains.                       |
| 4. Ear-rings.    | 10. Processes.                              |
| 5. Finger-rings. | 9. Watch-chain attachments.                 |
| 8. Gem-setting.  |   |
| 6. Lockets.      |   |

### CLASS 84.—MUSIC. (V.)

#### Sub-classes.

- |  |                               |
|--|-------------------------------|
| 1. Accordions.                         | 24. Pedals—                   |
| 82. Autoharps.                         | 97. Auxiliary,                |
| 53. Auxiliary strings.                 | 98. Guards,                   |
| 2. Banjos and guitars.                 | 99. Locks.                    |
| 6. Castanets.                          | 61. Pianissimo devices.       |
| 85. Charts—                            | Piano—                        |
| 86. Harmony and transposition.         | 26. Actions—                  |
| 7. Clarinets and flutes.               | 100. Dampers,                 |
| 55. Combined organ and piano.          | 101. Flanges,                 |
| 8. Cornets and trumpets.               | 102. Frames,                  |
| 9. Couplers.                           | 103. Hammers,                 |
| 10. Drums.                             | 60. Pedal,                    |
| 81. Electric actions.                  | 104. Plectrum.                |
| 11. Exercising devices—                | 66. Agraffes and bridges—     |
| 91. Hand attachments,                  | 27. Attachments,              |
| 92. Keyboard,                          | 52. Cases,                    |
| 93. Keyboard attachments,              | 28. Frames,                   |
| 94. Vocal.                             | 29. Legs,                     |
| 87. Finger-boards.                     | 30. Sounding-boards,          |
| 13. Harmonicas—                        | 40. Stringing,                |
| 88. Supports.                          | 67. Tuning-pins—              |
| 12. Harmonic attachments—              | 105. Coupling-clamp,          |
| 56. Dampers—                           | 106. Direct-pull,             |
| 83. Violin.                            | 107. Lever,                   |
| 14. Harps.                             | 108. Presser-deflectors,      |
| 48. Indicators.                        | 109. Push-rod and carrier,    |
| 15. Insulators.                        | 110. Worm-gear.               |
| 57. Keyboard self-playing attachments. | 25. Pianos—                   |
| 58. Key-holding devices.               | 70. Sostenuto,                |
| 16. Keys and keyboards—                | 46. Violin,                   |
| 96. Touch-regulators.                  | 31. Without strings.          |
| 49. Knee-swells.                       | 68. Recording attachments.    |
| 17. Leaf-turners.                      | 33. Reeds.                    |
| 79. Mouthpieces.                       | 34. Reed-boards,              |
| 89. Musical blocks.                    | 37. Self-playing instruments— |
| 18. Notation.                          | 71. Cylinder,                 |
| Organ—                                 | 113. Electropneumatic,        |
| 19. Actions—                           | 84. Note-sheets,              |
| 95. Electropneumatic,                  | 51. Pneumatic,                |
| 20. Pneumatic,                         | 114. Spurs and picks.         |
| 50. Bellows,                           | 69. Solo attachments.         |
| 21. Cases,                             | 41. Transposers.              |
| 22. Pipes,                             | 42. Tremolos.                 |
| 59. Stop-actions—                      | 43. Tuning-instruments.       |
| 54. Combination,                       | Violin—                       |
| 23. Swells,                            | 72. Bows,                     |
| 47. Wind-chests.                       | 73. Bridges,                  |
| Organs—                                | 74. Chin-rests,               |
| 90. Pedal bass,                        | 75. Dampers and mutes,        |
| 32. Pipe,                              | 77. Tail-pieces,              |
| 35. Reed—                              | 78. Tuning-pegs.              |
| 36. Attachments for,                   | 44. Violins—                  |
| 111. Folding,                          | 76. Practice,                 |
| 112. With pipes.                       | 115. Supports.                |
| 38. Steam.                             | 80. Zithers—                  |
|  | 116. Keyed,                   |
|  | 117. Picks.                   |

### CLASS 120.—STATIONERY. (V.)

#### Sub-classes.

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| 4. Bill-files—                   | 13. Inkstands.                    |
| 40. Boxes—                       | 37. Knife-erasers.                |
| 41. Separators,                  | 38. Lead and crayon holders.      |
| 42. Continuous-web,              | 36. Paper-clips.                  |
| 43. Division leaves and pockets, | 18. Pens.                         |
| 44. Followers,                   | 19. Penholders.                   |
| 45. Impaling-pins,               | 20. Pen and pencil cases.         |
| 46. Packet-holders,              | 21. Pen racks and cleaners.       |
| 47. Pins and followers.          | 22. Pencils.                      |
| 5. Blotters.                     | 23. Pencil-clasps.                |
| 6. Calendars—                    | 25. Pencil-sharpeners.            |
| 48. Continuous-web,              | 26. Post-office boxes.            |
| 49. Disk,                        | 28. Scholars' companions.         |
| 50. Roller.                      | 29. Slate and blackboard rubbers. |
| 7. Copy-holders.                 | 30. Sponge-cnps.                  |
| 39. Desk-rulers.                 | 35. Stylographic pens.            |
| 9. Erasers.                      | 32. Ticket-cases.                 |
| 11. Fountain-pens.               |                                   |
| 12. Hand-rests.                  |                                   |

# DIVISION VI.

## EXAMINER LITTLEWOOD.

CLASSES.—8, Bleaching and Dyeing; 23, Chemicals; 52, Explosives; 71, Fertilizers; 167, Medicines; 95, Photography; 99, Preserving; 127, Sugar and Salt; 128, Surgery.

### CLASS 8.—BLEACHING AND DYEING. (VI.)

#### Sub-classes.

- |                                |                                      |
|--------------------------------|--------------------------------------|
| 16. Apron vats and stretchers. | 19. Open vats.                       |
| 2. Bleaching.                  | 17. Perforated rolls and spray-jets. |
| 1. Carbon dyes.                | 7. Press-dyeing.                     |
| 18. Close vats.                | 8. Renovating dress.                 |
| 5. Dyeing processes.           | 15. Steam and bleach chests.         |
| 6. Dyes.                       | 12. Wool-cleaning.                   |
| 13. Mordants.                  |                                      |

### CLASS 23.—CHEMICALS. (VI.)

#### Sub-classes.

- |                                  |   |
|----------------------------------|---|
| 1. Acids. Mineral                | 10. Metalloids. Embraces non-illuminating gases, sulphur, and phosphorus. |
| 21. Ammonia.                     | 11. Packing chemicals.  |
| 3. Apparatus.                    | 26. Purifying water.  |
| 24. Carbon compounds, not dyes.  | 13. Salines.  |
| 5. Fire-extinguishing compounds. | 22. Soda and potash.  |

### CLASS 52.—EXPLOSIVES. (VI.)

#### Sub-classes.

- |                     |                           |
|---------------------|---------------------------|
| 1. Blasting-powder. | 5. Matches.               |
| 2. Fulminates.      | 3. Nitro compounds.       |
| 4. Gunpowder.       | 6. Pyrotechnic compounds. |

### CLASS 71.—FERTILIZERS. (VI.)

#### Sub-classes.

- |                  |                           |
|------------------|---------------------------|
| 1. Apparatus.    | 7. Phosphates.            |
| 9. Compositions. | 8. Sewage and night-soil. |
| 6. Organic.      |                           |

### CLASS 167.—MEDICINES. (VI.)

#### Sub-classes.

- |                          |                          |
|--------------------------|--------------------------|
| 2. Capsules.             | 7. Internal remedies.    |
| 3. Disinfectants.        | 8. Plasters.             |
| 4. Extracts.             | 11. Tobacco substitutes. |
| 5. Hair dyes and tonics. | 9. Topical remedies.     |
| 6. Insecticides.         | 10. Veterinary.          |

### CLASS 95.—PHOTOGRAPHY. (VI.)

#### Sub-classes.

- |                          |                              |
|--------------------------|------------------------------|
| 31. Actinometers.        | 22. Pictures.                |
| 2. Baths.                | 36. Plate-holders—           |
| 4. Burnishing.           | 43. Magazine.                |
| 5. Cameras—              | 25. Printing and vignetting. |
| 39. Magazine.            | 29. Processes.               |
| 40. Panoramic.           | 26. Retouching.              |
| 7. Camera-stands.        | 38. Roll-holders.            |
| 8. Coloring.             | 44. Shutters—                |
| 9. Daguerreotypy.        | 45. Curtain.                 |
| 10. Dark-rooms.          | 46. Diaphragm.               |
| 12. Embossing.           | 47. Pivoted.                 |
| 41. Finders.             | 48. Sliding.                 |
| 42. Focusing devices.    | 49. Studios—                 |
| 116. Heaters and driers. | 50. Accessories.             |
| 17. Mechanical printing. | 35. Surfaces—                |
| 18. Mounting.            | 51. Sensitive.               |
| 52. Photosculpture.      | 52. Trays and tanks.         |

### CLASS 99.—PRESERVING. (VI.)

#### Sub-classes.

- |                 |                      |
|-----------------|----------------------|
| 1. Antiseptics. | 8. Exclusion of air. |
| 2. Apparatus.   | 11. Food compounds.  |
| 4. Cold.        | 9. Fumigation.       |
| 5. Desiccation. | 10. Panification.    |
| 6. Egg-testers. | 12. Wood saturation. |

### CLASS 127.—SUGAR AND SALT. (VI.)

#### Sub-classes.

- |                          |                            |
|--------------------------|----------------------------|
| 1. Bleaching cane-juice. | 10. Glucose.               |
| 2. Bone-black.           | 19. Graining and draining. |
| 3. Centrifugal machines— | 11. Mixers.                |
| 21. Honey-extractors,    | 12. Molds and carriages.   |
| 20. Liquid-separators,   | 14. Refining salt.         |
| 22. Testers.             | 15. Refining sugar.        |
| 4. Confectionery.        | 16. Salt-making.           |
| 6. Cube sugar.           | 23. Starch.                |
| 7. Defecating.           | 17. Sugar-making.          |
| 8. Diffusion apparatus.  | 18. Vacuum-pans.           |
| 9. Evaporating-pans.     |                            |

### CLASS 128.—SURGERY. (VI.)

#### Sub-classes.

- |                               |                                |
|-------------------------------|--------------------------------|
| 2. Atomizers.                 | 16. Movement cure.             |
| 33. Baby jumpers—             | 17. Nasal douches.             |
| 34. Walkers.                  | 44. Needle holders and cases.  |
| 3. Bandages—                  | 18. Nipples.                   |
| 37. Bandage-machines,         | 19. Nursing-bottles.           |
| 38. Suspensory,               | 20. Obstetrics.                |
| 39. Water.                    | 21. Pessaries.                 |
| 4. Breast-pumps.              | 22. Pharmaceutical.            |
| 32. Capsule-machines.         | 23. Scarificators and lancets. |
| 5. Catamenial sacks.          | 24. Speculums.                 |
| 40. Chest-protectors.         | 25. Syringes—                  |
| 9. Depurators.                | 45. Expanding arm,             |
| 35. Dumb-bells and clubs.     | 46. Pile.                      |
| 10. Ear.                      | 47. Water-bag.                 |
| 36. Exercising-machines.      | 49. Thermocauters.             |
| 11. Eye.                      | 26. Trusses.                   |
| 13. Inhalers and respirators— | 51. Urinary apparatus.         |
| 42. Mask.                     | 27. Veterinary—                |
| 43. Laryngoscopes.            | 52. Horse-shields.             |
| 28. Miscellaneous.            |                                |

# DIVISION VII.

## EXAMINER SKINNER.

CLASSES.—46, Games and Toys; 56, Harvesters; 208, Velocipedes.

### CLASS 46.—GAMES AND TOYS. (VII.)

#### Sub-classes.

- |                            |                          |
|----------------------------|--------------------------|
| 4. Balls and bats.         | 27. Roundabouts.         |
| 43. Base-ball.             | 53. Skaters' appliances. |
| 6. Billiard appliances—    | 50. Skates—              |
| 7. Balls,                  | 51. Roller.              |
| 8. Chalk-cups,             | 52. Skate-wheels.        |
| 9. Cues,                   | 30. Skipping-ropes.      |
| 10. Cne-tip fasteners,     | 31. Soap-bubble pipes.   |
| 11. Cushions,              | 32. Spinning-tops.       |
| 12. Tables,                | 33. Stilts.              |
| 13. Table-levelers.        | 35. Toy building-blocks. |
| 14. Buzzes and whirligigs. | 36. Toy money-boxes.     |
| 15. Croquet.               | 37. Toys—                |
| 16. Dice-boxes.            | 49. Electric,            |
| 20. Game apparatus.        | 40. Figure—              |
| 21. Game-boards.           | 45. Wheeled,             |
| 22. Hobby-horses.          | 46. Sounding—            |
| 23. Kites.                 | 47. Wheeled,             |
| 42. Lawn-tennis.           | 48. Wheeled.             |
| 25. Playing-cards.         | 38. Trundles and hoops.  |
| 41. Puzzles and magic.     |                          |

### CLASS 56.—HARVESTERS. (VII.)

#### Sub-classes.

- |                               |                                  |
|-------------------------------|----------------------------------|
| 1. Bean-harvesters.           | Horse-rakes—                     |
| Binders—                      | 66. Drags,                       |
| 35. Compressors,              | 67. Hand-dumpers,                |
| 36. Grain-adjusters,          | 68. Hay-cockers,                 |
| 37. Sheaf-carriers.           | 69. Rake-teeth.                  |
| 2. Clover-harvesters.         | 115. Side-delivery.              |
| 3. Combined rakes and ted-    | 19. Lawn-mowers—                 |
| ders.                         | 114. Grass-catchers.             |
| Corn-harvesters—              | 20. Manure-forks.                |
| 40. Implements.               | 33. Miscellaneous.               |
| 103. Stalk-cutters—           | Mowers—                          |
| 104. Droppers, Crane          | 70. Anomalies,                   |
| 105. Direct-tilting,          | 72. Center-cut,                  |
| 106. Ejector,                 | 73. Front-cut, One-wheel         |
| 107. Endless-apron,           | 74. Two-wheels,                  |
| 108. Horizontally moving      | 76. Rear-cut, One-wheel          |
| and tilting,                  | 77. Two-wheels,                  |
| 109. Sliding-bottom,          | 75. Reciprocating-gear,          |
| 110. Strippers,               | 78. Thrust-cut.                  |
| 111. Strippers, Comb          | 32. Platform adjustments.        |
| 112. Knife,                   | 22. Reels.                       |
| 113. Roller.                  | Revolving horse-rakes—           |
| 5. Corn-shockers.             | 80. Flop-over,                   |
| 6. Cotton-harvesters.         | 81. Wheel.                       |
| Cutting apparatus—            | 27. Scythes and cradles.         |
| 42. Endless,                  | 24. Seats.                       |
| 43. Guard-fingers and finger- | Self-binders—                    |
| bars,                         | 82. Clips and prepared           |
| 44. Reciprocating,            | hands,                           |
| 45. Rotary,                   | 83. Cord-knotters,               |
| 46. Vibrating.                | 84. General structure,           |
| Droppers—                     | 85. Gleaners and binders,        |
| 47. Direct-tilting,           | 86. Tension and take-up de-      |
| 49. Miscellaneous,            | vices,                           |
| 48. Opening and closing,      | 87. Twisters and tuckers,        |
| 50. Side-delivery,            | 88. Wire-twisters.               |
| 51. Swinging and tilting.     | Self-rakers—                     |
| 99. Fruit-gatherers.          | 89. Endless carriers,            |
| 9. Gearing.                   | 90. Gaveling-tongs,              |
| 31. Grain wheels and casters. | 91. Platform-movement,           |
| Hand-binders—                 | 92. Reciprocating, horizontal    |
| 52. Attachments,              | curvilinear,                     |
| 53. Elevated delivery, Rear   | 93. Reciprocating, horizontal    |
| 54. Elevated delivery, Side   | rectilinear,                     |
| 55. Flat delivery,            | 96. Rotary, horizontal axis,     |
| 56. Manual traction.          | 94. Rotary, vertical axis,       |
| 12. Hand-rakes.               | switch,                          |
| Hay-loaders—                  | 95. Rotary, vertical axis, no    |
| 61. Endless-belts,            | switch,                          |
| 62. Intermittent,             | 98. Traveling, horizontal ir-    |
| 63. Lifting-reels,            | regular path,                    |
| 64. Walking-rakes.            | 97. Traveling, vertical irreg-   |
| 100. Headers.                 | ular path.                       |
| 16. Hedge-trimmers.           | 102. Shock-compressors.          |
| 17. Hemp and flax harvesters. | 28. Tedders.                     |
| Horse-rakes—                  | 29. Thrashers.                   |
| 65. Draft-dumpers,            | 30. Track clearers and dividers. |

### CLASS 208.—VELOCIPEDES. (VII.)

#### Sub-classes.

- |                               |                                |
|-------------------------------|--------------------------------|
| 11. Bearings.                 | 14. Locks.                     |
| Bicycles—                     | 25. Luggage-carriers.          |
| 5. Header-preventers,         | 10. Pedals and cranks.         |
| 4. Ordinary, Rigid-frame      | Polyceycles—                   |
| 6. Safety, Rigid-frame        | 42. Figure,                    |
| 7. Spring-frame,              | 43. Spring-frame,              |
| 28. Supports,                 | 44. Steering devices.          |
| 8. Tandem.                    | Polyceycles, Propulsion—       |
| Bicycles, Propulsion—         | 40. Axle-couplings,            |
| 16. Crank and gear,           | 32. Crank and chain,           |
| 17. Crank and chain,          | 31. Crank and gear,            |
| 18. Lever and crank,          | 30. Crank and pitman,          |
| 19. Lever, crank, and gear or | 33. Lever and crank,           |
| chain,                        | 34. Lever, crank, and gear or  |
| 20. Lever and ratchet,        | chain,                         |
| 21. Lever, ratchet, and gear  | 35. Lever and ratchet,         |
| or chain.                     | 36. Lever, ratchet, and gear   |
| 23. Miscellaneous,            | or chain,                      |
| 22. Rack-and-pinion.          | 38. Miscellaneous,             |
| 13. Brakes.                   | 37. Rack-and-pinion,           |
| 24. Children's seats.         | 41. Rowing-machines.           |
| 27. Coupling-bars.            | 15. Saddles.                   |
| 9. Crank-clutches.            | 12. Steering-heads and handle- |
| 3. Dicycles.                  | bare,                          |
| 29. Dress and mud-guards.     | 26. Steps and foot-rests.      |
| 2. Epicycles.                 | 1. Unicycles.                  |



# DIVISION VIII.

ACTING EXAMINER McROBERTS.

CLASSES.—5, Beds; 155, Chairs; 156, Curtains, Shades, and Screens; 45, Furniture; 65, Kitchen and Table Articles; 211, Store Furniture.

## CLASS 5.—BEDS. (VIII.)

### Sub-classes.

eds—	Bedsteads—
Air,	Sofa—
Camp.	51. Vertically-moving
d-bottoms—	frame,
Fabrics,	17. Table,
Fabrics and springs,	18. Wardrobe-bedsteads—
Slats,	52. Center-folding,
Slats and springs,	53. End-folding,
Springs.	34. Extension,
3. Bed-clothing.	54. Shifting-fulcrum,
4. Bedsteads—	37. Single-frame,
41. Attachments,	38. Sliding-frame.
42. Braces,	22. Clothes-clamps.
8. Extension,	55. Corner-fastenings.
9. Folding,	56. Cradles—
12. Invalid—	57. Motor-operated.
43. Head-sections,	58. Cribs—
44. Lifters and conveyers,	59. Attachments.
45. Vertically-moving	10. Hammocks—
frame,	30. Hooks,
16. Sofa—	31. Stretchers,
46. Extension.	32. Supports.
47. Folding-back,	13. Mattresses.
48. Folding back and seat,	14. Mosquito-nets and canopies.
49. Folding-seat,	15. Pillows.
50. Rotary back and seat,	33. Pillow-sham holders.
	21. Springs.

## CLASS 155.—CHAIRS. (VIII.)

### Sub-classes.

3. Chaire—	33. Pads and feet.
26. Attachments,	Rests—
27. Adjustable backs,	9. Foot,
28. Adjustable backs and	10. Head.
seats,	34. School seats and desks.
29. Backs and seats independ-	Seats—
ently adjustable,	2. Car,
4. Bottoms,	5. Circus,
6. Convertible,	37. Reversible,
7. Dentists',	25. Spring.
8. Folding—	19. Settees.
30. Adjustable,	20. Sofas.
11. Invalid,	22. Stools and seats—
12. Nursery,	38. Duplex,
13. Opera,	39. Pawl and ratchet,
16. Reclining,	40. Pedestal,
18. Rocking—	41. Screw.
31. Platform,	Stools—
Step-ladder,	42. Cane,
23. Surgical,	32. Folding.
36. Swinging,	35. Swings.
24. Tilting.	43. Upholstery.

## CLASS 156.—CURTAINS, SHADES, AND SCREENS. (VIII.)

### Sub-classes.

15. Awnings.	Shade—
2. Curtain-cord holders.	28. Raisers.
32. Curtain-cord tighteners.	29. Rollers—
Curtain—	30. Dropping,
33. Holders,	34. Friction-brake,
19. Poles,	35. Ratchet-and-pawl,
20. Poles and rings,	36. Spring,
22. Pole-supports,	31. Sticks.
1. Rings and pins.	17. Venetian blinds.
16. Flexible blinds.	13. Window cornices—
23. Shade and curtain hangers.	14. Screens—
Shade—	37. Exits,
24. Brackets,	38. Extensible,
25. Fastenings,	39. Rolling,
26. Guides,	10. Shades.
27. Hangers, vertically-ad-	
justable,	

## CLASS 45.—FURNITURE. (VIII.)

### Sub-classes.

1. Book-cases—	Book and music holders—
53. Adjustable shelf-parti-	57. Base-supported—
tions,	80. Adjustable,
54. Adjustable shelves and	81. Rotary,
shelf-supports,	59. Body-supported,
55. Hanging shelves,	60. Book-stands—
78. Knockdown,	85. Folding,
79. Revolving,	86. Leveling,
66. Roller-shelves.	58. Bracket-supported—

## CLASS 45.—Continued.

Book and music holders—	72. Portable nursery-fences.
Bracket-supported—	71. Provision-safes—
82. Adjustable,	102. Knockdown,
61. Leaf-holders,	103. Revolving,
83. Leaf-rests,	104. Window.
62. Music-stands—	24. Quilting-frames.
121. Portable,	105. Screens—
63. Panel,	106. Folding.
64. Portfolio.	28. Soap-holders.
Brackets—	41. Spittoons—
65. Arm-supporting—	107. Covered,
84. Adjustable,	108. Flushing.
66. End-supporting—	31. Tables—
67. Adjustable.	109. Adjustable angularly,
5. Bureaus—	110. Angularly and verti-
88. Knockdown.	cally,
89. Carpet-stretchers.	74. Folding,
43. Carpet stretchers and tack-	111. Vertically,
ers.	75. Attachments,
68. Covers.	9. Extension—
6. Desks—	112. Center,
90. Attachments,	113. End,
91. Lids—	114. Flexible top,
92. Flexible,	115. Slides,
69. Portable,	11. Folding—
93. Sectional,	116. Sectional top,
70. Table.	17. Kitchen,
7. Drawers—	46. Lap,
77. Guides,	47. Leaf-supports,
94. Locking devices,	48. Leg fastening and brac-
95. Swinging,	ing,
96. Tilting.	117. Pedestals,
13. Hat and coat racks.	26. Self-waiting,
15. Insect-guards.	27. Sewing-machine—
16. Kitchen-cabinets.	120. Covers,
18. Mirrors—	50. Surgical,
97. Bracket,	51. Wall.
Mirrors—	32. Towel racks and stands.
98. Hand,	52. Type-writer cabinets.
99. Multiple,	33. Umbrella-stands,
100. Stand,	36. Wall-protectors.
39. Window.	37. Wardrobes—
22. Packing furniture.	118. Knockdown.
23. Picture-hangers—	38. Wasbstands—
101. Adjustable.	119. Reservoir.

## CLASS 65.—KITCHEN AND TABLE ARTICLES. (VIII.)

### Sub-classes.

3. Cake-turners.	25. Fruit-lifters.
5. Casters—	26. Jar-lifters.
55. Rotary.	28. Ladles.
10. Compound tools—	29. Napkin-holders.
56. Gripping.	30. Oyster-openers.
45. Condiment-holders—	31. Pitchers—
57. Pulverizing.	64. Tilting frame.
12. Culinary.	32. Plate-lifters.
13. Cups—	65. Racks and rests.
58. Collapsible.	36. Scoops.
15. Dishes and plates—	46. Stopper-extractors—
59. Covered,	47. Hook.
60. Pivoted covers.	48. Screw—
16. Dish covers—	49. Lever-operated,
61. Stands.	50. Rotary,
20. Dust-pans—	51. Screw and lever.
62. Brush attachments,	52. Table-tongs.
63. Foot pieces.	53. Trays—
22. Egg-cups.	54. Attaching devices.

## CLASS 211.—STORE FURNITURE. (VIII.)

### Sub-classes.

1. Bag and twine holders—	Display-racks—
2. Bag-holders,	15. Adjustable-arm,
3. Twine-holders—	16. Enclosed,
4. Take-up—	17. Hanging,
5. Rotary.	18. Roll,
6. Bins.	19. Rope,
7. Cabinets—	20. Rotary—
8. Delivering,	21. Enclosed,
9. Grocers',	22. Sample sheet—
10. Spool.	23. Rotary.
11. Counters—	24. Display-stands.
12. Attachments.	25. Show-cases—
13. Display-forms.	26. Lid-lifters.
14. Display-racks.	27. Shelving.

# DIVISION IX.

EXAMINER TRYON.

CLASSES.—4, Baths and Closets; 169, Fire-Extinguishers; 138, Hydraulic Motors; 103, Pumps; 182, Sewerage; 137, Water-Distribution.

## CLASS 4.—BATHS AND CLOSETS. (IX.)

### Sub-classes.

- |                       |                                 |
|-----------------------|---------------------------------|
| 1. Basins and stands. | Water-closets—                  |
| 2. Bathing apparatus. | 22. Siphon.                     |
| 19. Bed-pans.         | 17. Valved.                     |
| 5. Closet-cisterns.   | 23. Washout.                    |
| 20. Dry closets.      | 18. Water-closet attachments.   |
| 11. Sinks and traps.  | 15. Water-closet valves.        |
| 12. Urinals.          | 21. Water-closet and sewer ven- |
| 13. Vapor-baths.      | tilation.                       |
| Water-closets—        |                                 |
| 16. Plunger,          |                                 |

## CLASS 169.—FIRE-EXTINGUISHERS. (IX.)

### Sub-classes.

- |                |                |
|----------------|----------------|
| 4. Car-heater. | 2. Portable.   |
| 1. Chemical.   | 3. Stationary. |

## CLASS 138.—HYDRAULIC MOTORS. (IX.)

### Sub-classes.

- |                   |                                |
|-------------------|--------------------------------|
| 11. Chain.        | Turbines—                      |
| 8. For elevators. | 4. Bottom-supply.              |
| 9. For jacks.     | 5. Side-ring supply.           |
| 10. For presses.  | 6. Top and side direct-supply. |
| 1. Oscillating.   | 7. Top-ring supply.            |
| 2. Reciprocating. |                                |
| 3. Rotary—        |                                |
| 12. Feathering.   |                                |

## CLASS 103.—PUMPS. (IX.)

### Sub-classes.

- |                                    |                               |
|------------------------------------|-------------------------------|
| 45. Accumulators.                  | 17. Hollow piston-rod.        |
| 2. Attachments.                    | 22. Lift.                     |
| 46. Brakes.                        | 47. Lift and force.           |
| 5. Cattle.                         | 48. Miscellaneous parts.      |
| 6. Chain.                          | 23. Oil.                      |
| 50. Collapsible tube.              | 25. Oscillating.              |
| 7. Compound.                       | 27. Pistons.                  |
| 8. Compressed-air water-elevators. | 51. Railway-tank feeders.     |
| 10. Diaphragm.                     | 29. Rams.                     |
| 11. Double-acting.                 | 44. Rotary double-piston.     |
| 12. Double-cylinder.               | 43. Rotary single-piston.     |
| 13. Double-piston.                 | 31. Sand.                     |
| 14. Drainage.                      | 32. Ship.                     |
| 16. Force.                         | 49. Valves.                   |
|                                    | 35. Windlass water-elevators. |

## CLASS 182.—SEWERAGE. (IX.)

### Sub-classes.

- |                                |                               |
|--------------------------------|-------------------------------|
| 1. Backwater and animal gatos. | 5. Manholes and catch-basins. |
| 2. Cleaning.                   | 6. Mechanical treatment.      |
| 3. Construction.               | 7. Systems.                   |
| 4. Flushing.                   |                               |
| 8. Flush-tank siphons.         |                               |

## CLASS 137.—WATER-DISTRIBUTION. (IX.)

### Sub-classes.

- |                          |                                |
|--------------------------|--------------------------------|
| 1. Aquariums.            | Filters—                       |
| 32. Check-valves.        | 42. Rotary-bed,                |
| Cocks and faucets—       | 52. Service-pipe,              |
| 26. Compound,            | 51. Strainers,                 |
| 4. Reciprocating valves, | 44. Submerged,                 |
| 5. Sliding gates,        | 43. Systems.                   |
| 27. Tank,                | 11. Fountains.                 |
| 35. Thermal,             | 12. Funnels.                   |
| 6. Tube-compressors,     | 33. Hose-patches.              |
| 7. Turning plugs.        | 13. Hydrants and plugs.        |
| 9. Cut-offs and spouts.  | 14. Irrigating and sprinkling. |
| Filters—                 | 16. Mains and pipes.           |
| 36. Beer,                | 17. Nozzles.                   |
| 37. Cistern-cleaners,    | Pipe-couplings—                |
| 45. Cistern-supply,      | 28. Detachable,                |
| 46. Decanters,           | 34. Detachable and flexible,   |
| 38. Faucet,              | 29. Permanent,                 |
| 47. Filtering-faucets,   | 30. Valved.                    |
| 39. Granular-bed,        | 53. Safety-valves.             |
| 48. Materials,           | 18. Sampling-tubes.            |
| 40. Oil,                 | 20. Siphons.                   |
| 49. Porous-wall,         | 21. Tanks.                     |
| 41. Portable,            | 54. Valves for inflation.      |
| 50. Pressure,            | 31. Water-supply hose-holders. |

# DIVISION X.

EXAMINER SANDERS.

## CLASS.—21, Carriages and Wagons.

### CLASS 21.—CARRIAGES AND WAGONS. (X.)

#### *Sub-classes.*

- |                                 |                             |
|---------------------------------|-----------------------------|
| 80. Ambulances and stretch-ers. | 47. Sled-propellers.        |
| 2. Axle-boxes.                  | 48. Sleds—                  |
| 4. Axle-skeins.                 | 94. Hand,                   |
| 5. Axles.                       | 95. Shifting-thills,        |
| 7. Bodies.                      | 96. Wheel-runners.          |
| 81. Boots and aprons.           | 49. Spoke-sockets.          |
| 10. Brake-levers.               | 97. Spring-gear—            |
| 8. Brakes—                      | 98. Side-bar cross,         |
| 9. Automatic,                   | 99. Axle cross,             |
| 82. Shoes.                      | 100. Longitudinal,          |
| 11. Carriage-irons.             | 101. Lever.                 |
| 85. Chafe-irons.                | 50. Springs—                |
| 12. Children's carriages—       | 102. Bolster,               |
| 83. Folding,                    | 105. Braces and equalizers, |
| 84. Stops.                      | 103. Elliptic,              |
| 86. Chute-wagons.               | 51. Platform,               |
| 13. Clips.                      | 104. Shackles               |
| 14. Close carriages.            | 53. Torsion.                |
| 15. Dash-boards.                | 54. Standards.              |
| 125. Doors and windows.         | 55. Steps.                  |
| 76. Draft-equalizers.           | 56. Sulkies.                |
| 19. Drays.                      | 57. Thill-couplings—        |
| 20. Dumping-wagons.             | 106. Antirattlers,          |
| 21. End-gates.                  | 107. Jacks.                 |
| 87. Fellies and rims.           | 108. Thill-supports.        |
| 23. Fenders.                    | Tires—                      |
| 24. Fifth-wheels.               | 109. Cusbion,               |
| 88. Hand-barrows.               | 112. Inflating.             |
| 74. Hay-racks.                  | 110. Metallic.              |
| 26. Hearses.                    | 111. Pneumatic,             |
| 27. Holdbacks.                  | 113. Repairing.             |
| 75. Horse-detachers.            | 59. Tire-tighteners.        |
| 28. Horse-carriages.            | 63. Tongue-supports.        |
| 29. Hounds.                     | 60. Top-joints.             |
| 30. Hub-attaching devices.      | 61. Top-props.              |
| 89. Hub-caps.                   | 62. Tops.                   |
| 31. Hubs.                       | 114. Traction-engines—      |
| 32. King-bolts.                 | 124. Steppers.              |
| 33. Lumber-wagons.              | 64. Traction-wheels.        |
| 90. Motor-vehicles.             | 65. Tracks—                 |
| 77. Neck-yokes.                 | 121. Barrel,                |
| 36. Poles and shafts—           | 116. Brick,                 |
| 91. Convertible.                | 122. Drying,                |
| 92. Pole-tips.                  | 118. Elevating,             |
| 39. Running-gear.               | 115. House-moving,          |
| 40. Sand-bands.                 | 120. Implement,             |
| 41. Seat-locks.                 | 117. Piano,                 |
| 42. Seats—                      | 119. Water-barrel.          |
| 43. Shifting,                   | 68. Wheelbarrows.           |
| 44. Spring.                     | 69. Wheels—                 |
| 45. Shifting-rails.             | 123. Spring.                |
| 93. Short-turning gear.         | 79. Whiffletree-hooks.      |
| 46. Sled-brakes.                | 78. Whiffletrees.           |

# DIVISION XI.

EXAMINER HARMON.

CLASSES.—12, Boots and Shoes; 24, Clasps, Buckles, and Buttons; 54, Harness; 60, Hose and Belting; 69, Leather-Working Machinery.

## CLASS 12.—BOOTS AND SHOES. (XI.)

### Sub-classes.

- |                                |                                |
|--------------------------------|--------------------------------|
| 2. Boot-jacks.                 | 11. Pegs.                      |
| 30. Boot-treeing machines.     | 12. Pegging-jacks.             |
| 3. Boot-trees.                 | 13. Pegging-machines. Nails    |
| 4. Burnishing.                 | and pegs—                      |
| 24. Channeling-machines.       | 35. Wire.                      |
| 5. Crimping.                   | 14. Rubber.                    |
| 6. Edge-planes and shaves.     | 15. Shanks and machines.       |
| 32. Hand nailing implements.   | 16. Shoe-fastenings.           |
| 34. Heel-machines.             | 17. Soles.                     |
| 33. Heel-nailing machines.     | 18. Sole and heel trimming ma- |
| 29. Heel-stiffener machines.   | chines.                        |
| 7. Heels.                      | 19. Sole-machines.             |
| 8. Ice-creepers.               | 26. Sole and heel plates.      |
| 9. Lasts.                      | 20. Tips and stiffeners.       |
| 10. Lasting-machines.          | 21. Tools.                     |
| 25. Lasting and lasting tools. | 22. Uppers.                    |
| 31. Peg-floats.                | 23. Upper-machines.            |

## CLASS 24.—CLASPS, BUCKLES, AND BUTTONS. (XI.)

### Sub-classes.

- |                             |                             |
|-----------------------------|-----------------------------|
| 26. Baggage-checks.         | 8. Eyeletting-machines.     |
| 23. Buckles and snap-hooks  | 25. Garment-supporters.     |
| combined.                   | 30. Glove-fastenings.       |
| 1. Buckles—                 | 9. Hooks.                   |
| 27. Personal wear.          | 10. Hooks and eyes.         |
| 2. Buttons—                 | 33. Napkin-supporters.      |
| 31. Hinged shoe,            | 11. Necktie-fasteners.      |
| 21. Separable.              | 13. Paper-fasteners.        |
| 3. Buttoners.               | 14. Patches.                |
| 4. Button-fasteners.        | 32. Ribbon-clasps.          |
| 5. Button-setting machines. | 15. Rings.                  |
| 29. Button-setting tools.   | 16. Safety attachments.     |
| 6. Clasps.                  | 17. Snap-hooks.             |
| 31. Corset-fastenings.      | 20. Suspenders.             |
| 24. Cuff-holders.           | 18. Tags and tag-fasteners. |
| 7. Eyelets.                 | 19. Ticket-clasps.          |

## CLASS 54.—HARNESS. (XI.)

### Sub-classes.

- |                              |                         |
|------------------------------|-------------------------|
| 40. Billet-loops.            | Harness—                |
| 1. Bonnets and covers.       | 12. Saddles,            |
| 41. Breast-strap slides.     | 13. Tools.              |
| 2. Bridle-bits.              | 35. Hitching-straps.    |
| 3. Bridles and halters.      | 16. Horse-boots.        |
| 37. Check hooks and terrets. | 17. Horse-collars.      |
| 38. Checking and unchecking. | 31. Ox-yokes.           |
| 4. Collar-fasteners.         | 36. Rein-buttons—       |
| 5. Collar-machines.          | 32. Holders,            |
| 6. Fly-nets.                 | 39. Supports.           |
| 8. Hame-fasteners.           | 21. Riding-saddles.     |
| 28. Hame-tugs.               | 22. Spurs and stirrups. |
| 9. Hames.                    | 24. Trace-carriers.     |
| 10. Harness—                 | 25. Trimmings.          |
| 29. Attachments,             | 26. Tugs.               |
| 11. Machines,                | 27. Whips.              |
| 30. Pads,                    | 33. Whip-sockets.       |

## CLASS 60.—HOSE AND BELTING. (XI.)

### Sub-classes.

- |                    |                     |
|--------------------|---------------------|
| 1. Belt-fasteners— | 3. Belting.         |
| 2. Machines,       | 4. Hose and tubing. |
| 7. Stretchers.     | 5. Hose-machines.   |

## CLASS 69.—LEATHER-WORKING MACHINERY. (XI.)

### Sub-classes.

- |              |               |
|--------------|---------------|
| 1. Cutting.  | 4. Splitting. |
| 3. Machines. |               |

# DIVISION XII.

EXAMINER AUGHINBAUGH.

CLASSES.—192, Clutches; 193, Conveyers; 212, Cranes and Derricks; 187, Elevators; 57, Hoisting; 64, Journal-Boxes, Pulleys, and Shafting; 74, Machine Elements; 186, Store-Service.

## CLASS 192.—CLUTCHES. (XII.)

### Sub-classes.

- |   |  |
|---|--|
| 1. Clutches.                            | 8. Longitudinally-movable, single-face.      |
| 2. Eccentric or wedge.                  | 9. Longitudinally-movable, with projections. |
| 3. Expansible segment.                  | 19. Magnetic.                                |
| 18. Fluid.                              | 10. Multiple-disk.                           |
| 4. Frictional and positive.             | 11. Radially-movable shoes.                  |
| 15. Intermittent grip—                  | 12. Radially-movable shoes, opposing.        |
| 17. Ratchet.                            | 13. Split-ring.                              |
| 16. Strap and dog or ball.              | 14. Strap.                                   |
| 5. Lever-shoe.                          |  |
| 6. Locking-pawl.                        |  |
| 7. Longitudinally-movable, double-face. |  |

## CLASS 193.—CONVEYERS. (XII.)

### Sub-classes.

- |                                    |  |
|------------------------------------|--|
| 1. Conveyers.                      | 11. Reciprocating.                       |
| 2. Endless—                        | 12. Retransfer and weighing.             |
| 3. Adjustable leg,                 | 13. Screw.                               |
| 4. Belt,                           | 20. Store-house.                         |
| 5. Boot,                           | 14. Thrasher attachments—                |
| 6. Buckets,                        | 15. Foldable,                            |
| 7. Buckets, with traction-rollers, | 16. Laterally and vertically adjustable, |
| 8. Flights,                        | 17. Oscillatory,                         |
| 9. Hooks.                          | 18. Vertically-adjustable.               |
| 10. Pneumatic—                     | 19. Trimmers.                            |
| 21. Stackers.                      |  |

## CLASS 212.—CRANES AND DERRICKS. (XII.)

### Sub-classes.

- |  |  |
|--|--|
| 1. Cranes and derricks.                | 9. Rotary load-support—                        |
| 2. Rectilinearly-movable load-support— | 10. Vertically-adjustable jib,                 |
| 3. Electric,                           | 11. Motor-operated—                            |
| 4. Hydraulic,                          | 12. Vertically-adjustable jib.                 |
| 5. Load-lifting devices,               | 13. Rotary rectilinearly-movable load-support. |
| 6. Longitudinal-shaft driver,          | 14. Stationary load-support—                   |
| 7. Stationary motor,                   | 15. Jib.                                       |
| 8. Traveling motor.                    |  |

## CLASS 187.—ELEVATORS. (XII.)

### Sub-classes.

- |   |  |
|---|--|
| 10. Adjustable balances.                | Safety devices—                          |
| 11. Automatic stops.                    | 25. Slack-cable stops,                   |
| 12. Chairs.                             | 19. Speed-governors—                     |
| 13. Combined locks and automatic stops. | 20. Fluid-retarders,                     |
| 2. Controllers—                         | 23. Well-bottom cushions,                |
| 35. Running-rope.                       | 24. Well-obstruction.                    |
| 14. Counterweights.                     | 9. Screw.                                |
| 3. Dumb-waiters.                        | 26. Screw and traveling sheave or block. |
| 1. Elevators.                           | Well-doors—                              |
| 15. Guides.                             | Horizontal—                              |
| 5. Hod.                                 | 27. Horizontal bioge,                    |
| 6. Indicators.                          | 28. Horizontally-slidable,               |
| 7. Lazy-tongs.                          | 29. Vertical hinge,                      |
| 16. Locks.                              | 30. Vertically-slidable,                 |
| 17. Mail.                               | Vertical—                                |
| 8. Safety devices—                      | 31. Horizontal hinge,                    |
| 18. Door-locked controllers,            | 32. Horizontally-slidable,               |
| 21. Overwinding,                        | 33. Vertical hinge,                      |
| 22. Shaft-guide catches and grips,      | 34. Vertically-slidable.                 |

## CLASS 57.—HOISTING. (XII.)

### Sub-classes.

- |                              |  |
|------------------------------|--|
| 107. Bale and box hooks.     | Lifters—   |
| 2. Barrel-rollers.           | 15. Lifting-jacks—                                       |
| 34. Block and tackle—        | 97. Bar and cam-lever,                                   |
| 5. Differential pulleys.     | 43. Lever,   |
| 22. Capstans and windlasses— | 98. Lever, bar, and clutch-loop,                         |
| 82. Capstans,                | 99. Lever, bar, and double-acting pawls,                 |
| 83. Drum and clutch,         | 100. Lever, bar, and pawl,                               |
| 84. Hand-crank operated,     | 101. Lever and lifting-bar,                              |
| 85. Lever-operated,          | 102. Rack and pinion,                                    |
| 86. Steam-winch,             | 44. Screw.   |
| 87. Sweep-operated,          | 16. Loading and unloading—                               |
| 88. Wild-cat,                | 52. Hay,   |
| 89. Windlass with capstan.   | 90. Hoist and dump,                                      |
| 37. Chutes.                  | 91. Hoist, raised track, and dump,                       |
| 67. Elevated carriers—       | 81. Load-binders,  |
| 68. Draft-smstaining,        | 46. Pilers,  |
| 69. Lever-lock,              | 92. Raised track,  |
| 70. Non-lowering support,    | 93. Raised track, track-end dump,                        |
| 71. Ratchet-lock,            | 94. Raised track, track-end dump, tilting track-section, |
| 72. Rope-catch,              | 47. Shoveling devices,                                   |
| 73. Sheave-frame catch,      | 77. Tilting-platform,                                    |
| 96. Ways.                    | 95. Vertical hoist and dump.                             |
| 9. Grapples.                 | 18. Skids.   |
| Hay-forks—                   | 53. Stackers.  |
| 39. Corkscrew,               | 19. Stump-extractors—                                    |
| 40. Grapple,                 | 103. Drum,   |
| 41. Harpoon,                 | 104. Lever,  |
| 42. Tilting.                 | 105. Lever and drum,                                     |
| 11. Hay-slings.              | 106. Screw.  |
| 13. Hoisting-buckets.        | 79. Wagon-raisers.                                       |
| 108. Lewises.                |  |
| Lifters—                     |  |
| 109. Barrel and box,         |  |
| 110. Picture,                |  |
| 111. Spittoon,               |  |
| 112. Spool,                  |  |
| 113. Store-goods.            |  |

## CLASS 64.—JOURNAL-BOXES, PULLEYS, AND SHAFTING. (XII.)

### Sub-classes.

- |                               |                        |
|-------------------------------|------------------------|
| 27. Axles, lubricating.       | Journal-boxes—         |
| 4. Belt-shifters.             | Roller-bearings—       |
| 5. Belt-tighteners.           | 36. Ball,              |
| 7. Compensating journals.     | 37. Ball and cylinder, |
| 21. Idle-pulley supports.     | 38. Cylinder—          |
| 10. Journal-boxes—            | 39. Circular series.   |
| 20. Brasses,                  | 25. Thrust-bearings.   |
| 19. Compositions,             | 17. Pulleys—           |
| 22. Gnards,                   | 8. Expansible,         |
| 23. Lids,                     | 40. Grip,              |
| 24. Lubricating—              | 26. Lubricating,       |
| 31. Band-applying,            | 18. Split.             |
| 32. Centrifugal,              | 12. Shaft-casings—     |
| 28. Coolers,                  | 13. Couplings,         |
| 33. Roller-applying—          | 14. Hangers.           |
| 34. Elastically-supported,    | 29. Shafting—          |
| 35. Yieldably-supported pads. | 30. Flexible.          |

## CLASS 74.—MACHINE ELEMENTS. (XII.)

### Sub-classes.

- |                         |                              |
|-------------------------|------------------------------|
| 1. Cams and eccentrics. | Gearing—                     |
| 5. Cranks and levers—   | 29. Yieldable.               |
| 33. Handles.            | 8. Gibs and keys.            |
| 6. Fly-wheels.          | 13. Machine-brakes—          |
| 7. Gearing—             | 37. Strap.                   |
| 21. Belt,               | 14. Mechanical movements.    |
| 26. Frictional,         | 20. Overcoming dead-centers. |
| 34. Planetary—          | 16. Pawls and ratchets.      |
| 35. Eccentric,          | 17. Pitmen.                  |
| 36. Screw,              | 27. Racks and pinions.       |
| 28. Sectional,          | 18. Treadles—                |
| 31. Sprocket—           | 30. Hand attachments.        |
| 32. Sprocket-chains,    | 19. Universal joints.        |

## CLASS 186.—STORE-SERVICE. (XII.)

### Sub-classes.

- |                         |                |
|-------------------------|----------------|
| 3. Buffers.             | 2. Propulsion— |
| 4. Carriers—            | 11. Cable.     |
| 5. Wheeled.             | 12. Spreaders. |
| 6. Elevators and drops. | 7. Switches.   |
| 1. Gravity.             |                |

# DIVISION XIII.

EXAMINER BLODGETT.

CLASSES.—86, Arms and Projectiles: Making; 59, Chains, Staples, and Horseshoes; 30, Cutlery; 53, Hardware-Making; 10, Metal Bolts, Nuts, Rivets, and Screws; 77, Metal Boring and Drilling; 205, Metal-Drawing; 78, Metal-Forging; 80, Metal-Rolling; 76, Metal Tools and Implements: Making; 134, Metal-Tube Manufacture; 82, Metal Turning, Planing, and Milling; 206, Metal-Welding; 85, Nails and Spikes; 163, Needles and Pins; 152, Wagon, Car, and Track Irons.

## CLASS 86.—ARMS AND PROJECTILES. MAKING (XIII.)

### Sub-classes.

- |                      |                         |
|----------------------|-------------------------|
| 1. Arms.             | 4. Cartridges and caps. |
| 2. Bullets and shot. | 5. Gun-barrels.         |
| 3. Cannon and ball.  | 7. Rifling.             |

## CLASS 59.—CHAINS, STAPLES, AND HORSESHOES. (XIII.)

### Sub-classes.

- |                            |                        |
|----------------------------|------------------------|
| 1. Chains.                 | 6. Horseshoe-machines. |
| 2. Chain and link making.  | 7. Staples.            |
| 4. Horseshoe-bars. Making  | 8. Staples. Making     |
| 5. Horseshoe-calks. Making |                        |

## CLASS 30.—CUTLERY. (XIII.)

### Sub-classes.

- |                             |                          |
|-----------------------------|--------------------------|
| 1. Animal-shears.           | Knives—                  |
| 2. Buttonhole-cutters.      | 8. Hay.                  |
| 3. Can-openers.             | 10. Pocket.              |
| 16. Envelope-openers.       | 11. Pruning implements.  |
| 21. Fork-guards.            | 12. Razors.              |
| 5. Forks.                   | 13. Scissors and shears. |
| 22. Forks and spoons. Solid | 14. Twine-cutters.       |
| 9. Knives—                  | 15. Wick-trimmers.       |
| 20. Gage,                   | 17. Wire-shears          |

## CLASS 53.—HARDWARE-MAKING. (XIII.)

### Sub-classes.

- |                                   |                              |
|-----------------------------------|------------------------------|
| 1. Bridge-irons.                  | 9. Miscellaneous.            |
| 2. Builders' hardware.            | 20. Musical-instrument work. |
| 3. Cutlery.                       | 21. Printing appliances.     |
| 4. Eyebolts and hooks.            | 13. Spinners' and weavers'.  |
| 6. Ferrules, rings, and thimbles. | 15. Spoons. Manufacture of   |
| 8. Gas and water fittings.        | 16. Springs.                 |
| 10. Hinges.                       | 22. Stamping.                |
| 11. Leather-workers' hardware.    | 17. Sucker-rod joints.       |
|                                   | 18. Umbrella-irons.          |

## CLASS 10.—METAL BOLTS, NUTS, RIVETS, AND SCREWS. (XIII.)

### Sub-classes.

- |  |                               |
|--|-------------------------------|
| 1. Bolts and nuts. Dressing and assembling | 8. Screws.                    |
| 2. Bolts and rivets.                       | 9. Screw-blank feeders.       |
| 3. Bolts and rivets. Making                | 10. Screw-cutting machines.   |
| 4. Capping screws and nails.               | 11. Screw-swaging machines.   |
| 5. Metal-screw machines.                   | 12. Screw-tapping machines.   |
| 6. Nuts and washers.                       | 13. Screw-threading machines. |
| 7. Nuts and washers. Making                | 14. Taps and dies.            |
|  | 15. Wood-screw machines.      |

## CLASS 77.—METAL BORING AND DRILLING. (XIII.)

### Sub-classes.

- |                                    |                        |
|------------------------------------|------------------------|
| 1. Bits.                           | 5. Drills, Hand—       |
| 2. Boring and drilling appliances. | 9. Ratchet.            |
| 3. Boring-machines.                | 6. Drilling-machines.  |
| 4. Drill-chucks.                   | 7. Reamers and drifts. |
|                                    | 8. Tapping mains.      |

## CLASS 205.—METAL-DRAWING. (XIII.)

### Sub-classes.

- |                 |              |
|-----------------|--------------|
| 1. Bars.        | 2. Tubes.    |
| 5. Draw-plates. | 3. Wire—     |
| 7. Lubricants.  | 8. Covering, |
| 6. Roller-dies. | 4. Reels.    |

## CLASS 78.—METAL-FORGING. (XIII.)

### Sub-classes.

- |                   |                         |
|-------------------|-------------------------|
| 1. Anvils.        | 11. Riveting.           |
| 16. Compressing.  | 18. Shafts and pulleys. |
| 3. Drop-hammers.  | 19. Structural work.    |
| 5. Forging.       | 15. Upsetting metal.    |
| 8. Olivers.       | 21. Wire pointing.      |
| 9. Power-hammers. |                         |

# DIVISION XIII.—CONTINUED.

## CLASS 80.—METAL-ROLLING. (XIII.)

### Sub-classes.

- |                         |                              |
|-------------------------|------------------------------|
| 11. Angle-irons.        | 13. Reworking.               |
| 1. Cylindrical.         | 14. Reds for wire.           |
| 2. Foil. Manufacture of | 7. Rolling. Miscellaneous    |
| 3. Mill appliances.     | 9. Sheet and hoop iron manu- |
| 8. Plates and bars.     | facture.                     |
| 5. Puddlers' balls.     | 10. Taper.                   |
| 6. Railroad-rails.      |                              |

## CLASS 76.—METAL TOOLS AND IMPLEMENTS. MAKING (XIII.)

### Sub-classes.

- |                                      |                                |
|--------------------------------------|--------------------------------|
| 1. Augers.                           | 14. Pitchforks.                |
| 2. Axes and hatchets.                | 15. Plow-irons.                |
| 27. Compound metal-working machines. | 16. Rake and harrow irons.     |
| 3. Cultivator-irons.                 | 26. Saw clamps and jointers.   |
| 4. Dies.                             | 19. Saw-setting.               |
| 5. Drills.                           | 22. Saw-swaging.               |
| 6. Farm implements.                  | 17. Saws.                      |
| 7. File-blanks.                      | 18. Saws. Gumming              |
| 8. File-cutting.                     | 20. Saws, sharpening. Recipro- |
| 9. Files and rasps.                  | cating tool                    |
| 10. Hammers.                         | 21. Saws, sharpening Rotary    |
| 11. Harvester-irons.                 | tool                           |
| 12. Hoes and shovels.                | 23. Scythes.                   |
| 13. Picks and mattocks.              | 24. Tools and implements.      |
|                                      | 25. Wrenches.                  |

## CLASS 134.—METAL-TUBE MANUFACTURE. (XIII.)

### Sub-classes.

- |                |                     |
|----------------|---------------------|
| 10. Bent seam. | Seamless—           |
| 3. Cross weld. | Rolling—            |
| 11. Lining.    | 5.    Longitudinal, |
| 8. Mandrels.   | 6.    Spiral.       |
| 4. Seamless—   | 2. Spiral weld.     |
| Rolling—       | 1. Straight weld.   |
| 7.    Cross,   | 9. Tubes.           |

## CLASS 82.—METAL TURNING, PLANING, AND MILLING. (XIII.)

### Sub-classes.

- |                                  |                           |
|----------------------------------|---------------------------|
| 1. Centerers.                    | Planers—                  |
| 2. Cutters and cutter-holders.   | 12. Rotary bed or cutter. |
| 4. Gear-cutting.                 | 13. Rests.                |
| 5. Key-seat cutters.             | 14. Shaping and slotting. |
| 6. Lathe-chucks.                 | Turning—                  |
| 7. Mandrels and work-holders.    | 15. Irregular forms,      |
| 8. Milling.                      | 16. Miscellaneous,        |
| 9. Milling-cutters.              | 17. Tapers,               |
| 10. Planer-chucks.               | 18. Wheels and axles.     |
| Planers—                         | 19. Watchmakers' lathes.  |
| 11. Reciprocating bed or cutter, | 20. Wrist-pin turners.    |

## CLASS 206.—METAL-WELDING. (XIII.)

### Sub-classes.

- |                   |                   |
|-------------------|-------------------|
| 7. Fluxes.        | Ingets and piles— |
| Ingets and piles— | 6.    Tube.       |
| 2. Bar,           | Metal-working—    |
| 3. Beam,          | 8.    Electric.   |
| 4. Plate,         | 1. Welding.       |
| 5. Rail,          |                   |

## CLASS 85.—NAILS AND SPIKES. (XIII.)

### Sub-classes.

- |                                    |                            |
|------------------------------------|----------------------------|
| 1. Cut-nail making.                | 18. Nail-heads. Ornamental |
| 3. Horseshoe-nail-blank finishing. | 8. Nail-plate feeders.     |
| 2. Horseshoe-nail cutting.         | 9. Nails and spikes.       |
| 4. Horseshoe-nail forging.         | 15. Shoe nails and tacks.  |
| 6. Nail-distributers.              | 16. Spike-making.          |
|                                    | 17. Wrought-nail making.   |

## CLASS 163.—NEEDLES AND PINS. (XIII.)

### Sub-classes.

- |                            |                           |
|----------------------------|---------------------------|
| 1. Machine-needles. Making | 5. Pins. Papering         |
| 4. Pins. Making            | 6. Sewing-needles. Making |

## CLASS 152.—WAGON, CAR, AND TRACK IRONS. (XIII.)

### Sub-classes.

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| 1. Car axles and boxes. Making   | 8. Repairing and capping rails.     |
| 2. Car and locomotive irons.     | 10. Tire-upsetting.                 |
| 3. Carriage clips and shackles.  | 11. Track-irons. Miscellaneous      |
| 4. Carriage-irons. Miscellaneous | 12. Wagon axles and boxes. Making   |
| 5. Car-wheels and tires.         | 13. Wagon tires and fellies. Making |
| 6. Fifth-wheels. Making          |                                     |
| 7. Railway-chairs.               |                                     |

# DIVISION XIV.

EXAMINER MAXSON.

CLASSES.—194, Coin-Controlled Apparatus; 168, Farriery; 153, Metal-Bending; 201, Metal-Ornamenting; 79, Metal Personal Wear: Making; 164, Metal Punching and Shearing; 81, Metal-Working Tools; 151, Nut and Bolt Locks; 113, Sheet-Metal Ware: Making; 140, Wire-Working.

## CLASS 194.—COIN-CONTROLLED APPARATUS. (XIV.)

### Sub-classes.

- |  |                       |
|--|-----------------------|
| 1. Article-delivery—                   | Fraud-preventives—    |
| 26. Chance,                            | 34. Washer-catchers.  |
| 2. Oscillatory,                        | 30. Gasometers.       |
| 3. Rotatory—                           | 13. Height-measurers. |
| 4. Sheet-feed,                         | 14. Induction-coils.  |
| 5. Slidable pusher, coin-engaged,      | 15. Loan-receptacles. |
| 6. Slidable pusher, detent,            | 16. Miscellaneous.    |
| 7. Slidable pusher, detent and handle, | 31. Music-boxes.      |
| 27. Spiral.                            | 35. Opera-glasses.    |
| 32. Boot-blackening.                   | 17. Phonographs.      |
| 28. Chairs.                            | 18. Photographic.     |
| 29. Dice-throwers.                     | 19. Race-courses.     |
| 8. Door and turnstile locks.           | 36. Shooting devices. |
| 9. Exhibitors, movable-object—         | 25. Telephones.       |
| 10. Surface.                           | 20. Testers—          |
| 11. Fluid-delivery.                    | 21. Lung,             |
| 33. Magnets.                           | 22. Strike.           |
|  | 23. Weighing—         |
|  | 24. Recorders.        |

## CLASS 168.—FARRIERY. (XIV.)

### Sub-classes.

- |                                |                         |
|--------------------------------|-------------------------|
| 10. Calks.                     | Shoes—                  |
| 1. Calk-sharpeners.            | 13. Ox,                 |
| 2. Hoof and shoe spreaders.    | 14. Removable-calk,     |
| 3. Hoof cleaners and trimmers. | 15. Soft-tread,         |
| 5. Hoof-pads.                  | 16. Swamp.              |
| 6. Shoes—                      | 7. Shoe-nail clinchers. |
| 11. Composite.                 | 8. Shoeing-stands.      |
| 12. Nailless.                  | 9. Toe-weights.         |

## CLASS 153.—METAL-BENDING. (XIV.)

### Sub-classes.

- |                               |                       |
|-------------------------------|-----------------------|
| 1. Bending—                   | 5. Dishing plates.    |
| 11. By press,                 | 6. Flanging—          |
| 12. By rolls.                 | 7. Straight.          |
| 2. Coiling.                   | 8. Straightening—     |
| 13. Coiling and bending pipe. | 9. Plates and sheets. |
| 3. Corrugating.               | 10. Twisting.         |
| 4. Curving plates.            |                       |

## CLASS 201.—METAL-ORNAMENTING. (XIV.)

### Sub-classes.

- |                 |               |
|-----------------|---------------|
| 1. Ornamenting. | 3. Rolling.   |
| 2. Pressing.    | 4. Stippling. |

## CLASS 79.—METAL PERSONAL WEAR. MAKING (XIV.)

### Sub-classes.

- |                        |                             |
|------------------------|-----------------------------|
| 1. Buttons and clasps. | 4. Personal wear.           |
| 2. Eyelets.            | 5. Thimbles. Manufacture of |
| 3. Ornamental chains.  | 6. Watches and clocks.      |

## CLASS 164.—METAL PUNCHING AND SHEARING. (XIV.)

### Sub-classes.

- |                                    |                              |
|------------------------------------|------------------------------|
| 6. Combined punching and shearing. | Punching—                    |
| 1. Cutting.                        | 13. Hand-lever,              |
| 7. Fence-barbs of sheet metal.     | 14. Rotary,                  |
| 9. Punches.                        | 15. Screw.                   |
| 2. Punching—                       | 3. Sawing.                   |
| 10. Crank,                         | 5. Shears. Lever and sliding |
| 11. Foot-lever,                    | 4. Shears. Rotary            |
| 12. Hammer,                        | 8. Tie-bands.                |

## CLASS 81.—METAL-WORKING TOOLS. (XIV.)

### Sub-classes.

- |                               |                               |
|-------------------------------|-------------------------------|
| 26. Bolt-holders.             | Pipe-wrenches—                |
| 23. Cutting sharpeners.       | 29. Expanding-jaw,            |
| 24. Nippers.                  | 13. Pivoted-jaw,              |
| Nut-wrenches—                 | 14. Pivoted-jaw, with cutter, |
| 5. Pivoted and spring jaw,    | 15. Rigid-jaw and spanner,    |
| 6. Ratchet-wheel,             | 16. Sliding-jaw,              |
| 7. Rigid-jaw,                 | 17. Sliding-jaw, with cutter. |
| 8. Rigid-socket and axle-nut, | 25. Pliers—                   |
| 9. Sliding-jaw,               | 18. Rod and bolt cutters,     |
| 27. Wheel.                    | 19. Smiths' tongs.            |
| Pipe-cutters—                 | Vises—                        |
| 10. Inside,                   | 20. Pipe and rod,             |
| 11. Outside,                  | 21. Smiths',                  |
| 12. Pipe-expanders.           | 22. Woodworkers'.             |
| Pipe-wrenches—                |                               |
| 28. Chain,                    |                               |

## CLASS 151.—NUT AND BOLT LOCKS (XIV.)

### Sub-classes.

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Base, key and ratchet. | 5. Thread.                  |
| 2. Base, washer.          | 6. Thread, key and ratchet. |
| 3. Side.                  | 7. Top.                     |
| 4. Side, key and ratchet. | 8. Top, key and ratchet.    |

## CLASS 113.—SHEET-METAL WARE. MAKING (XIV.)

### Sub-classes.

- |                                 |                            |
|---------------------------------|----------------------------|
| 23. Burnishing.                 | Soldering—                 |
| 1. Cutting printers' leads.     | Machines—                  |
| 2. Edging sheets.               | Dip—                       |
| 35. Lamp-work.                  | 39. Reciprocating carrier, |
| 34. Pens, pencils, and holders. | 40. Rotary table-carrier,  |
| 3. Roller-tools.                | 29. Endless-chain carrier, |
| 4. Screw-thread bending.        | 30. Rotary table-carrier.  |
| 5. Seaming sheets.              | 27. Soldering.             |
| 24. Spinning.                   | 10. Solders.               |
| 36. Stamping.                   | Tubing—                    |
| 11. Tools.                      | 13. Curved and spouts.     |
| 12. Troughs and moldings.       | 14. Grooving and seaming.  |
| Soldering—                      | 15. Pipe-elbows. Making    |
| 6. Clamps—                      | 16. Straight. Making       |
| 32. Expanding mandrel,          | Vessels—                   |
| 31. Trough.                     | 17. Bending. Angular—      |
| 37. Fluxes.                     | 18. Curved.                |
| 7. Irons—                       | 19. Seaming. Die—          |
| 25. Heaters—                    | 21. Roller.                |
| 33. Electric.                   | 20. Shaping. Die—          |
| 8. Machines—                    | 28. Fillers and forcers.   |
| 26. Dip—                        | 22. Wiring and flanging.   |
| 38. Endless-chain carrier,      |                            |

## CLASS 140.—WIRE-WORKING. (XIV.)

### Sub-classes.

- |                                     |                               |
|-------------------------------------|-------------------------------|
| 31. Attaching card-clothing.        | Fabrics—                      |
| 1. Barbing.                         | Making—                       |
| 12. Sheet-metal,                    | 33. Twisted,                  |
| 29. Tools.                          | 20. Working.                  |
| 3. Bending.                         | 21. Feeding and tension.      |
| 4. Bending and coiling.             | 13. Heddles. Making           |
| 5. Bending and twisting.            | 14. Joining.                  |
| 6. Coiling—                         | 15. Reels and spools.         |
| 26. By mandrel, definite lengths,   | 16. Tools.                    |
| 27. By mandrel, indefinite lengths. | 24. Winding.                  |
| 25. By rolls.                       | 17. Wiring bottles and corks— |
| 7. Covering.                        | 18. Brushes and cards,        |
| 8. Cutting and straightening.       | 19. Wood—                     |
| 9. Fabrics—                         | 11. Fences—                   |
| 10. Making—                         | 28. Gear,                     |
| 32. Coiled.                         | 29. Rack-bar,                 |
|                                     | 30. Sprocket,                 |
|                                     | 23. Fencing.                  |



# DIVISION XV.

EXAMINER BRICKENSTEIN.

CLASSES.—106, Artificial Stone, Lime, and Cement; 107, Bread, Cracker, and Lozenge Making; 18, Caoutchouc and Minor Plastics; 25, Clay and Pottery; 154, Composite Roofings and Coverings; 44, Fuel; 49, Glass; 92, Paper-Making; 94, Paving.

## CLASS 106.—ARTIFICIAL STONE, LIME, AND CEMENT. (xv.)

### Sub-classes.

- |                 |                |
|-----------------|----------------|
| 1. Composition. | 5. Plastering— |
| 3. Limekilns.   | 9. Fiber,      |
| 4. Molds.       | 7. Implements, |
| 6. Processes.   | 8. Retarders.  |

## CLASS 44.—FUEL. (xv.)

### Sub-classes.

- |                   |                    |
|-------------------|--------------------|
| 1. Artificial.    | 3. Peat-machines.  |
| 2. Fire-kindlers— | 4. Purifying coal. |
| 5. Absorbers,     |                    |
| 6. Automatic.     |                    |

## CLASS 107.—BREAD, CRACKER, AND LOZENGE MAKING. (xv.)

### Sub-classes.

- |                                |                               |
|--------------------------------|-------------------------------|
| 1. Bread and cracker machines. | 4. Mixers and kneaders.       |
| 3. Cake-cutters.               | 2. Pastry-boards.             |
| 9. Confectionery-machines.     | 7. Pie crimpers and trimmers. |
| 6. Lozenge-machines.           | 8. Rolling-pine.              |

## CLASS 49.—GLASS. (xv.)

### Sub-classes.

- |               |                       |
|---------------|-----------------------|
| 1. Articles.  | 8. Ornamentation.     |
| 2. Cutters.   | 10. Plate and window. |
| 4. Enameling. | 9. Presses.           |
| 7. Molds.     | 11. Tools.            |

## CLASS 18.—CAOUTCHOUC AND MINOR PLASTICS. (xv.)

### Sub-classes.

- |                               |                                     |
|-------------------------------|-------------------------------------|
| Caoutchouc—                   | Minor plastics—                     |
| 22. Articles,                 | 15. Coating and embossing moldings, |
| 4. Fabrics,                   | 19. Compositions,                   |
| 5. Hard rubber,               | 14. Crayon-machines,                |
| 6. Machine for coating,       | 18. Fibrous compositions,           |
| 8. Soft rubber,               | 17. Insulating compounds,           |
| 9. Vulcanizing apparatus.     | 13. Molding devices,                |
| Minor plastics—               | 12. Pill-machines,                  |
| 23. Articles,                 | 20. Processes,                      |
| 1. Artificial ivory,          | 10. Vulcanized fiber.               |
| 16. Button machines and dies, |                                     |
| 3. Celluloid,                 |                                     |

## CLASS 92.—PAPER-MAKING. (xv.)

### Sub-classes.

- |                                       |                                  |
|---------------------------------------|----------------------------------|
| 1. Bleaching.                         | 12. Ornamenting.                 |
| 2. Bronzing-machines.                 | 13. Paper-board.                 |
| 3. Calendering.                       | 14. Paper-hanging machines.      |
| 24. Carpet-lining.                    | 15. Paper-making machines.       |
| 4. Coating.                           | 16. Parchment.                   |
| 5. Digesters.                         | 17. Processes.                   |
| 6. Disintegrating fibrous substances. | 18. Pulp-engines and bed-plates. |
| 7. Fabrics.                           | 19. Pulp washing and straining.  |
| 8. Fibers.                            | 20. Rag dusters and engines.     |
| 9. Flocking.                          | 21. Stock-grinders.              |
| 10. Materials.                        | 22. Waterproofing and sizing.    |
| 11. Molding machines and articles.    | 23. Wood-grinders.               |

## CLASS 25.—CLAY AND POTTERY. (xv.)

### Sub-classes.

- |                         |                              |
|-------------------------|------------------------------|
| 1. Bricks.              | 24. Brick-making implements. |
| Brick-kilns—            | 6. Brick-molds—              |
| 18. Continuous—         | 25. Sanders.                 |
| 19. Tunnels,            | 26. Brick and tile cutters.  |
| 20. Downdraft,          | 8. Drain-tiles.              |
| 35. Furnaces,           | 9. Paving-tiles.             |
| 22. Reversible-draft,   | 10. Pottery articles—        |
| 21. Updraft,            | 11. Kilns,                   |
| 23. Vertical.           | 12. Machines.                |
| Brick-machines—         | 13. Pugmills.                |
| 27. Hydraulic,          | 16. Sarcophagi.              |
| 4. Reciprocating,       | 17. Tile-machines—           |
| 29. Rotary, horizontal, | 31. Continuous,              |
| 30. Vertical,           | 32. Dies,                    |
| 5. Screw,               | 33. Socket-formers,          |
| 28. Traveling molds.    | 34. Tampers.                 |

## CLASS 94.—PAVING. (xv.)

### Sub-classes.

- |              |                  |
|--------------|------------------|
| 2. Gutters.  | Pavements—       |
| Pavements—   | 8. Wood.         |
| 1. Concrete, | 4. Road-rammers. |
| 3. Iron,     | 6. Tools.        |
| 5. Stone,    | 7. Vault-covers. |

## CLASS 154.—COMPOSITE ROOFINGS AND COVERINGS. (xv.)

### Sub-classes.

- |                      |                 |
|----------------------|-----------------|
| 1. Apparatus.        | 2. Composition. |
| 4. Boiler-coverings. | 3. Felt.        |

# DIVISION XVI.

## EXAMINER BISSING.

CLASSES.—176, Electric Lighting; 177, Electric Signaling; 175, Electricity: Special Applications; 178, Telegraphy; 179, Telephony.

### CLASS 176.—ELECTRIC LIGHTING. (XVI.)

#### Sub-classes.

Cut-outs—	Positive-feed—
80. Electromagnetic,	219. Electric gear-clutch,
190. Hanger,	109. Gear-clutch,
79. Mechanical,	220. Step gear-clutch.
154. Oscillating snap,	Lights—
178. Oscillating spring,	112. Special features,
155. Rotary,	110. Arc and incandescent—
156. Sliding,	111. Non-feeding,
78. Thermal—	180. Ceiling-block,
192. Branch,	102. Filaments and carbons,
193. Lamp,	18. Incandescent—
194. Plug,	113. Special features,
195. Successive.	196. Stopper,
Lights—	98. Sockets and keys,
Arc—	19. Systems—
104. Gravity-feed—	166. Automatic-regulation,
105. Clutch,	129. Car,
216. Double-dog clutch,	197. Display,
106. Gear-clutch,	167. Hand-regulation,
217. Pivot-dog clutch,	198. Safety,
218. Ring-clutch,	130. Secondary-battery,
107. Positive-feed—	131. Test.
108. Clutch,	

### CLASS 177.—ELECTRIC SIGNALING. (XVI.)

#### Sub-classes.

1. Alarms—	26. Indicators—
199. Æquoreal,	159. Station.
200. Barokinetie,	38. Railway—
2. Burglar,	147. Block,
201. Safe.	146. Block systems,
3. Annunciators—	148. Cab—
139. Drop,	149. Sectional rail,
157. Drop system,	150. Sectional rail,
140. Step-by-step,	151. Track instruments.
158. Time.	39. Recorders.
7. Bells.	

### CLASS 175.—ELECTRICITY. SPECIAL APPLICATIONS. (XVI.)

#### Sub-classes.

4. Applications. General	Igniting devices—
181. Demagnetizing.	116. Manual,
21. Electromagnets.	91. Portable.
Igniting devices—	182. Ore-detectors.
115. Automatic,	183. Testing.
117. Inductional,	

### CLASS 178.—TELEGRAPHY. (XVI.)

#### Sub-classes.

Telegraphs—	Telegraphs—
46. Automatic,	Printing—
45. Circuits and systems,	142. Wheel,
47. Dial,	55. Quadruplex,
48. Duplex,	56. Railway-car,
49. Dynamo,	63. Reed.
50. Fire—	10. Circuit-closers—
160. Automatic,	202. Burglar,
162. Engine-house appara-	203. Lock,
tus,	204. Retarded,
163. Non-interfering,	128. Thermal.
165. Repeaters,	12. Condensers.
164. Variable signal—	29. Keys.
161. Dial,	30. Lightning-arresters—
103. Fire alarms and extin-	214. Magnetic,
guishers,	215. Thermal.
51. Multiplex,	35. Morse registers.
52. Perforating,	41. Relays and sounders.
54. Printing—	42. Repeaters.
141. Multiple-wheel,	69. Transmitters.

### CLASS 179.—TELEPHONY. (XVI.)

#### Sub-classes.

82. Anti-induction devices.	Telephones—
81. Conductors. Anti-induct-	100. Supports,
ive	65. Switchboards,
Telephones—	71. Switches,
57. Calls—	64. Systems—
143. Reed,	101. Automatic,
144. Step-by-step,	186. Central,
145. Strength and polarity,	133. Divided central,
58. Details,	187. House,
59. Electric—	134. Intermediate sub-sta-
184. Granular,	tion,
185. Multiple-electrode,	135. Multiple switch-
60. Magnetic,	board—
62. Radiophones,	136. Divided central,
77. Relays and repeaters,	137. Test.

# DIVISION XVII.

EXAMINER RICE.

CLASSES.—93, Paper-Manufactures; 101, Printing.

## CLASS 93.—PAPER-MANUFACTURES. (XVII.)

### Sub-classes.

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 2. Articles.                    | Cutters—                        |
| 5. Bag-machines—                | Rotary—                         |
| 38. Blank-formers,              | 30. Traveling,                  |
| 39. Transverse central folders, | 31. Traveling,                  |
| 40. Triangular folders,         | 15. Envelopes.                  |
| 41. Tube-closers,               | 16. Envelope-machines.          |
| 42. Tube-formers,               | 18. Folding.                    |
| 43. Tube formers and closers,   | 54. Label-affixers—             |
| 44. Tube formers and openers,   | 55. Cutter and plunger,         |
| 45. Tube formers, openers, and  | 56. Magazine,                   |
| closers—                        | 57. Pickers,                    |
| 46. Openers, Roll               | 58. Runway-machines—            |
| 47. Openers, Side               | 59. Label-bed.                  |
| 48. Tube-openers—               | 19. Label and tag machines.     |
| 49. Roll,                       | 21. Perforating and lace paper. |
| 50. Side,                       | 32. Reels.                      |
| 51. Tube openers and closers—   | 33. Serving apparatus—          |
| 52. Openers, Roll               | 34. Printing attachment,        |
| 53. Openers, Side.              | 35. Roll-holders—               |
| 10. Box-machines.               | 36. Cutting attachment,         |
| 11. Collar, cuff, and bosom ma- | 37. Feeding attachment.         |
| chines.                         | 24. Tube-machines—              |
| 27. Cutters—                    | 60. Folders,                    |
| 13. Reciprocating,              | 61. Spiral-wind,                |
| 14. Rotary—                     | 62. Straight-wind.              |
| 28. Slitters and winders,       | 25. Wrapping-machines.          |
| 29. Transverse,                 |                                 |

## CLASS 101.—PRINTING. (XVII.)

### Sub-classes.

- |                              |                                 |
|------------------------------|---------------------------------|
| 1. Address-printers—         | Inking apparatus—               |
| 2. Strip-form.               | 74. Fountains,                  |
| 3. Autographic registers.    | 75. Pads and holders,           |
| 4. Bed and cylinder ma-      | 76. Rollers—                    |
| chines—                      | 77. Compositions,               |
| 5. Cushions,                 | 78. Traveling ductor-plate,     |
| 153. Multirevolution—        | 79. Traveling roller and        |
| 154. Perfecting,             | plate.                          |
| 6. Oscillating-cylinder—     | 80. Mail-marking machines—      |
| 7. Perfecting,               | 81. Rotary—                     |
| 8. Perfecting,               | 82. Machines and stackers.      |
| 155. Sliders,                | 83. Marking-machines—           |
| 9. Stop-cylinder—            | 84. Rotary.                     |
| 10. Perfecting,              | 85. Multicolor-machines—        |
| 11. Traveling-cylinder—      | 86. Bed and cylinder—           |
| 12. Perfecting.              | 87. Multiple impression,        |
| 13. Bed and platen machines— | 88. Bed and platen,             |
| 14. Inking attachment,       | 89. Rotary—                     |
| 15. Oscillating—             | 90. Multiple printing           |
| 16. Roller-inker—            | couple,                         |
| 17. Orbital.                 | 91. Supplemental forms.         |
| 18. Roller and plate inker,  | 92. Numbering-machines—         |
| 19. Stationary roller-inker, | 93. Form attachments,           |
| 20. Roller-inker,            | 94. Hand,                       |
| 21. Roller and plate inker,  | 95. Measurers and markers.      |
| 22. Tympan-gages,            | 96. Paper-damping machines—     |
| 23. Web.                     | 97. Winders.                    |
| 24. Branding-stamps.         | 98. Planographic machines—      |
| 25. Chases.                  | 99. Bed and cylinder,           |
| 27. Color-machines—          | 100. Rotary.                    |
| 28. Coloring-tools.          | 101. Plate.                     |
| 26. Composing-sticks.        | Plate-machines—                 |
| 29. Deliveries—              | 102. Bed and cylinder,          |
| 30. Associators,             | 103. Bed and platen,            |
| 31. Droppers,                | 104. Rotary.                    |
| 32. Fly-frames,              | 105. Traveling-bed.             |
| 33. Gripper-fiers,           | 106. Press-copying—             |
| 34. Receiving-tables.        | 107. Damping,                   |
| 35. Electrotyping.           | 111. Printing couple appli-     |
| 36. Feeding—                 | ances—                          |
| 37. Gages—                   | 112. Anti-offset devices,       |
| 38. Front stops,             | 113. Blankets,                  |
| 39. Separators—              | 114. Friskets and fingers,      |
| 40. Buckling,                | 115. Grippers.                  |
| 41. Pneumatic,               | 116. Processes.                 |
| 151. Sheet-cutters,          | 117. Rotary machines—           |
| 42. Web.                     | 118. Associators—               |
| 43. Folders—                 | 119. Stop-sheet,                |
| 44. Longitudinal,            | 120. Associators and folders,   |
| 45. Longitudinal and rotary, | 122. Machines and associators,  |
| 46. Newspaper-wrapping       | 123. Machines and deliveries,   |
| machines,                    | 125. Machines and folders,      |
| 152. Oscillating,            | 124. Machines, associators, and |
| 47. Reciprocating,           | folders,                        |
| 48. Rotary,                  | 126. Non-perfecting,            |
| 49. Sheet-conveyers.         | 127. Reversing and perfecting,  |
| 50. Furniture—               | 121. Rotary conical printing    |
| 51. Quoins,                  | couple.                         |
| 52. Tools and appliances.    | 128. Ruling-machines—           |
| 53. Gallies—                 | 129. Rotary.                    |
| 54. Galley-locks—            | 130. Setting and distributing.  |
| 55. Rests.                   | 131. Sheet-stencils. Making     |
| 56. Hand-stamps—             | 132. Stenciling-machines.       |
| 57. Check-punches,           | 133. Stencil-making pens.       |
| 58. Head and handle—         | 134. Stencil-plates.            |
| 59. Inking attachment,       | 135. Stereotyping—              |
| 60. Mutilators,              | 136. Casting-boxes,             |
| 61. Roller—                  | 137. Matrices and materials.    |
| 62. Inking attachment,       | 138. Surfaces—                  |
| 63. Inking attachment,       | 139. Bases,                     |
| 64. Mutilators,              | 140. Holders—                   |
| 65. Perforators,             | 141. Sliding-clamp,             |
| 66. Sealing-tools,           | 142. Planographic—              |
| 67. Settable type-carrier—   | 143. Hektographs,               |
| 68. Clock set,               | 144. Holders and supports,      |
| 69. Inking attachment,       | 145. Roles,                     |
| 70. Tumbler.                 | 146. Types.                     |
| 71. Inking apparatus—        | 147. Ticket-machines.           |
| 73. Composition rollers,     | 148. Traveling-bed machines.    |
| making and preserv-          | 149. Type-cases.                |
| ing,                         | 150. Type-machines.             |

# DIVISION XVIII.

EXAMINER FOWLER.

CLASSES.—162, Injectors and Ejectors; 160, Steam and Vacuum Pumps; 122, Steam-Boilers; 110, Steam-Boiler Furnaces; 121, Steam-Engines; 136, Steam-Engine Valves.

## CLASS 162.—INJECTORS AND EJECTORS. (XVIII.)

*No sub-classes.*

## CLASS 160.—STEAM AND VACUUM PUMPS. (XVIII.)

*No sub-classes.*

## CLASS 122.—STEAM-BOILERS. (XVIII.)

*Sub-classes.*

- |                       |                                  |
|-----------------------|----------------------------------|
| 1. Attachments.       | 12. Introducing smoke and gases. |
| 5. Circulation.       | 33. Manholes—                    |
| 2. Cleaners—          | 13. Rotary.                      |
| 30. Steam or air jet. | 32. Safety devices.              |
| 22. Feeders.          | 14. Sectional—                   |
| 6. Fire-tube.         | 34. Headers.                     |
| 7. Flashers.          | 15. Separators.                  |
| 8. Flue and tubular.  | 16. Superheaters.                |
| Heating feed-water—   | 17. Tubes and flues.             |
| 29. Furnace-gases,    | 4. Vapor-generators.             |
| 20. Steam,            | 27. Water-tube—                  |
| 21. Steam-injected.   | 28. Coil.                        |
| 10. Incrustation.     | 18. Water fire-boxes.            |
| 11. Indicators.       |                                  |

## CLASS 110.—STEAM-BOILER FURNACES. (XVIII.)

*Sub-classes.*

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| 1. Ash-pans.                        | 5. Furnaces.                        |
| 14. Attachments.                    | Grates—                             |
| 2. Doors for steam-boiler furnaces. | 10. Hollow, Air                     |
| Furnace-feeding—                    | 18. Hollow. Water                   |
| 3. Air,                             | 12. Smoke and gas returning.        |
| 17. Chain grates.                   | 7. Spark-arresters for locomotives— |
| 4. Fuel,                            | 13. Conductors for cars.            |
| 15. Fine,                           |                                     |
| 16. Steam.                          |                                     |

## CLASS 121.—STEAM-ENGINES. (XVIII.)

*Sub-classes.*

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 1. Attachments.                 | Engines—                            |
| Condensers—                     | 51. Single-acting, compound,        |
| 25. Injector,                   | 59. Single-cylinder,                |
| 26. Surface.                    | 19. Steam-steering.                 |
| 46. Cylinder relief-valves.     | 6. Exhaust mechanism.               |
| Engines—                        | 27. Exhaust regenerated.            |
| 47. Bell-ringer,                | 61. Lubricators.                    |
| 60. Combined engine and boiler, | 22. Mufflers.                       |
| 3. Compound—                    | Packing—                            |
| 58. Locomotive,                 | 28. Compound and textile for steam, |
| 16. Hammer,                     | 12. Metallic piston for steam,      |
| 9. Locomotive,                  | 29. Rod for steam,                  |
| 35. Multiple-cylinder,          | 32. Steam-joint for steam.          |
| 48. Multiple-piston,            | 53. Pistons.                        |
| 11. Oscillating,                | 23. Speed-governors—                |
| 13. Portable,                   | 37. Centrifugal,                    |
| 17. Pumping—                    | 38. Marine,                         |
| 49. Duplex,                     | 42. Pressure.                       |
| 18. Rock-drilling,              | 54. Steam sanding device.           |
| 14. Rotary—                     | 20. Traps—                          |
| 57. Alternating-piston,         | 43. Expansion.                      |
| 30. Concentric-piston,          | 21. Valve-gear—                     |
| 31. Eccentric-piston,           | 44. Link,                           |
| 36. Impact,                     | 45. Rod,                            |
| 34. Oscillating-piston,         | 33. Shifting-eccentric—             |
| 41. Reciprocating-piston,       | 55. Automatic,                      |
| 50. Wabbling-piston,            | 56. Tripping cut-off.               |

## CLASS 136.—STEAM-ENGINE VALVES. (XVIII.)

*Sub-classes.*

- |                    |                     |
|--------------------|---------------------|
| 1. Balanced-slide— | 12. Reversing.      |
| 13. Double,        | 7. Rotary.          |
| 14. Roller.        | 9. Safety.          |
| 2. Cut-off.        | 8. Slide.           |
| 3. Gage-cocks.     | 10. Steam-actuated. |
| 4. Governor.       | 11. Throttle—       |
| 5. Piston.         | 15. Electric.       |
| 6. Puppet.         |                     |

# DIVISION XIX.

## EXAMINER STEWARD.

### CLASS 126.—Stoves and Furnaces.

#### CLASS 126.—STOVES AND FURNACES. (XIX.)

##### Sub-classes.

Boilers—	Heating systems—
1. Agricultural,	Car—
16. Domestic—	131. Air,
17. Steamers,	133. Steam,
84. Stand.	132. Water,
Burners—	Local—
79. Hay and straw,	123. Air,
49. Refuse.	135. Steam,
9. Coffee and tea pots.	134. Water,
12. Corn-poppers.	122. Steam,
13. Dampers—	Train—
14. Automatic—	126. Air,
113. Balanced-motor,	130. Smoke,
110. Draft-operated,	129. Steam,
116. Electrical,	137. Water—
114. Expansion,	128. Steam,
111. Fluid-pressure,	121. Water—
109. Positive-connection,	139. Steam.
112. Pressure-motor.	38. Hot-air registers.
95. Dough-raisers.	136. Liquid sterilizers.
115. Draft-regulators—	Ovens—
Steam-injected.	4. Bakers',
20. Fenders.	19. Domestic.
21. Fire-dogs.	87. Paint-breamers.
22. Fireplaces—	Pans—
89. Blowers,	2. Ash,
65. Fire-backs,	3. Bake,
23. Fronts,	80. Frying.
70. Hot-air.	94. Pipe-hangers.
25. Fire-pots and linings.	45. Platforms.
27. Foot-warmers.	47. Pot and lid lifters.
90. Fuel-boxes.	81. Pots and kettles.
Furnaces—	48. Ranges.
106. Bagasse,	51. Shovel, tongs, and pokers.
76. Cremation,	83. Snow and ice melters.
37. Hot-air—	72. Steam-radiator attach-
43. Magazine,	ments.
86. Steam,	85. Steam-radiators.
103. Hydrocarbon—	54. Steaming-tables.
104. Injector-burners,	55. Stove doors and windows.
105. Retort-vaporizers,	56. Hoods.
46. Portable.	57. Legs.
28. Glue-pots.	58. Lids and tops.
29. Grates—	59. Pipes.
96. Adjustable,	60. Pipe shelves.
98. Compound-movement,	61. Pipe thimbles.
97. Cut-offs,	62. Shelves.
24. Fireplace,	Stoves—
102. Raking attachment,	134. Car—
99. Reciprocating,	135. Protective casings,
100. Rocking-bar,	10. Cooking—
78. Rotary,	11. Hearths,
101. Vertical-movement.	41. Magazine,
108. Grates and grate-bars, sta-	50. Reservoir,
tionary.	71. Steam,
31. Gridirons.	66. Gas,
Heaters—	69. Heating—
5. Barrel,	92. Central air-tube,
137. Curling-irons,	34. Horizontal-body,
15. Dish,	33. Hot-air,
26. Flat-iron,	35. Open-front,
138. Frictional,	36. Panel,
117. Electric—	93. Parlor,
118. Pressing and ironing,	39. Lamp,
40. Lunch,	44. Magazine—
82. Solar,	42. Fireplace,
52. Soldering-iron.	64. Vapor.
32. Heating-drums.	63. Tea-kettles.
Heating systems—	88. Waffle-irons.
119. Air—	
120. Steam or water,	

# DIVISION XX.

## EXAMINER WILKINSON.

CLASSES.—3, Artificial Limbs; 16, Builders' Hardware; 32, Dentistry; 70, Locks and Latches; 109, Safes; 27, Undertaking.

### CLASS 3.—ARTIFICIAL LIMBS. (xx.)

#### Sub-classes.

- |                        |                     |
|------------------------|---------------------|
| 1. Arms and hands.     | 3. Legs.            |
| 4. Crutches.           | 6. Leg-joints.      |
| 5. Foot extensions.    | 7. Plastic splints. |
| 2. Fracture apparatus. |                     |

### CLASS 16.—BUILDERS' HARDWARE. (xx.)

#### Sub-classes.

- |                                |                              |
|--------------------------------|------------------------------|
| 1. Blind-stops.                | Hinges—                      |
| 2. Bolts—                      | 109. Flush,                  |
| 60. Can,                       | 49. Gate,                    |
| 61. Double-door,               | 111. Lock, frictional—       |
| 67. Jail bolt-work,            | 110. Positive,               |
| 63. Multiple,                  | 112. Longitudinally-adjust-  |
| 66. Operators,                 | able,                        |
| 64. Sliding,                   | 14. Safe,                    |
| 65. Sliding and rotary.        | 25. Spring,                  |
| 3. Carpet-fasteners—           | 27. Table,                   |
| 68. Clasps,                    | 113. Vertically-adjustable.  |
| 69. Moldings,                  | Sash-balances—               |
| 70. Strips,                    | 114. Friction,               |
| 71. Tack-fasteners.            | 115. Spring—                 |
| 4. Casters—                    | 148. Drum and cord,          |
| 73. Antifriction-rollers,      | 149. Friction-roller,        |
| loose,                         | 150. Gear and rack,          |
| 72. Antifriction-rollers, piv- | 116. Weight.                 |
| oted,                          | 16. Sash-cord fasteners—     |
| 45. Ball—                      | 125. Weight.                 |
| 151. Antifriction-rollers,     | 17. Sash-cord guides.        |
| 152. Pivoted,                  | 18. Sash-fasteners—          |
| 76. Pintle-retainers,          | 117. Gear and rack,          |
| 21. Sewing-machine,            | 53. Lifts,                   |
| 74. Spring,                    | 51. Mid-rail,                |
| 75. Wheels.                    | 52. Right-angle,             |
| 6. Door-checks—                | 118. Rod-clamps,             |
| 77. Buffers,                   | 119. Sliding bolts.          |
| 80. Catches and buffers,       | 19. Sash-holders—            |
| 79. Catches, floor,            | 121. Clamps,                 |
| 78. Catches, wall,             | 120. Combined fasteners,     |
| 81. Chain or link,             | 122. Foot,                   |
| 83. Foot-bolt,                 | 54. Roller-bearing,          |
| 82. Foot-lever,                | 123. Strips,                 |
| 84. Sliding-bolt,              | 124. Wedges.                 |
| 85. Trippers,                  | 20. Sash-weights.            |
| 86. Weights,                   | 22. Shutter bowers—          |
| 46. Doorchecks and closers—    | 23. Fasteners—               |
| 88. Liquid,                    | 126. Bars or bolts,          |
| 87. Pneumatic,                 | 128. Catches, double—        |
| 47. Closers. Gravitating       | 131. Gravity,                |
| 7. Hangers—                    | 130. Rod,                    |
| 89. Brackets,                  | 127. Single,                 |
| 90. Roller-carriage—           | 149. Sliding,                |
| 91. Ball-bearing,              | 129. Wall,                   |
| 92. Sliding,                   | 55. Combined sash,           |
| 93. Stay-rollers,              | 56. Fire,                    |
| 8. Securers—                   | 132. Hooks,                  |
| 154. Braces,                   | 133. Operators,              |
| 9. Springs—                    | 24. Workers—                 |
| 94. Bow,                       | 57. Combined slat,           |
| 95. India-rubber,              | 134. Cord or chain,          |
| 96. Lever attachments,         | 135. Levers,                 |
| 98. Sliding-door,              | 136. Rotary-shaft,           |
| 97. Strap and pulley attach-   | 137. Sliding-shaft,          |
| ments,                         | 138. Sliding-shutter.        |
| 99. Torsional—                 | 26. Stair-rods and securers— |
| 100. Coiled,                   | 139. Buttons,                |
| 101. Flat,                     | 140. Fasteners,              |
| 102. Volute.                   | 141. Rods.                   |
| 10. Handles—                   | 37. Tilt-alarms.             |
| 103. Coffin—                   | 28. Transom lifters—         |
| 153. Braces,                   | 142. Pivots.                 |
| 11. Hinges—                    | 29. Window-bead fasteners.   |
| 48. Awning-blind,              | 30. Window and door buttons— |
| 104. Box,                      | 58. Automatic,               |
| 5. Coach,                      | 143. Sliding bolts,          |
| 105. Concealed,                | 144. Screw,                  |
| 106. Door—                     | 59. Strips,                  |
| 107. Butt,                     | 145. Trippers,               |
| 108. Strap,                    | 146. Vertically-swinging.    |

### CLASS 32.—DENTISTRY. (xx.)

#### Sub-classes.

- |                        |                             |
|------------------------|-----------------------------|
| 1. Articulators.       | 7. Operative.               |
| 12. Bridge-work.       | 8. Pluggers—                |
| 13. Disks and holders. | 18. Air,                    |
| 14. Engines—           | 24. Angle attachments,      |
| 21. Bracket-supports,  | 25. Hand-operated,          |
| 23. Friction-gear,     | 26. Power-operated.         |
| 22. Standard-supports. | 19. Regulators and spacers. |
| 3. Foil-condensers.    | 20. Rubber-dam clamps.      |
| 15. Handpieces—        | 33. Saliva-ejectors.        |
| 11. Angle attachments. | 9. Teeth—                   |
| 16. Jaw-braces.        | 32. Filling,                |
| 17. Matrices.          | 29. Metal-crown,            |
| 4. Mechanical.         | 30. Porcelain-crown.        |
| 5. Miscellaneous.      | 10. Tools—                  |
| 6. Molds.              | 31. Burrs,                  |
| 27. Mouth-mirrors.     | 34. Forceps.                |
| 28. Obtundors.         |                             |

### CLASS 70.—LOCKS AND LATCHES. (xx.)

#### Sub-classes.

- |                             |                              |
|-----------------------------|------------------------------|
| 3. Box-fasteners—           | Locks—                       |
| 80. Seal,                   | 75. Pivoted-tumbler,         |
| 81. Sliding-bolt,           | 23. Seal,                    |
| 82. Spring-catch,           | 95. Seals—                   |
| 83. Hasp-fasteners.         | 31. Sliding-door,            |
| 7. Key-fasteners—           | 76. Sliding-tumbler,         |
| 65. Portable.               | 79. Systems of locks,        |
| 8. Keyhole-guards—          | 25. Tilt,                    |
| 61. Sliding and pivoted.    | 26. Time,                    |
| 9. Keys.                    | 27. Trunk—                   |
| 10. Knobs.                  | 115. Swinging-hasp,          |
| 11. Knob attachments—       | 77. Tumbler and dog,         |
| 84. Key-fastener,           | 78. Without tumblers.        |
| 85. Screw-spindle,          | 15. Lock-strikes—            |
| 86. Set-screw and pin fas-  | 52. Electric.                |
| tenor,                      | 16. Lock-trimmings.          |
| 87. Spring-fastener,        | 29. Locks and latches com-   |
| 88. Wedge-fastener.         | bined.                       |
| 12. Knob-roses.             | 17. Padlocks—                |
| 41. Knob-spindle fasteners. | 109. Alarm,                  |
| 13. Latches—                | 104. Divided-shackle,        |
| 64. Automatic-detent,       | 110. Indicator—              |
| 28. Gate,                   | 111. Pivoted-shackle,        |
| 51. Gravity,                | 19. Permutation—             |
| 44. Lifting—                | 112. Pivoted-shackle,        |
| 45. Hooked-end,             | 113. Sliding-shackle,        |
| 43. Pivoted-end,            | 96. Pin,                     |
| 21. Reversible,             | 105. Pivoted-shackle—        |
| 42. Sliding,                | 106. Sliding-bolt,           |
| 49. Swinging.               | 107. Rotating-shackle,       |
| 14. Locks—                  | 97. Seal,                    |
| 1. Alarm—                   | 108. Sliding-shackle.        |
| 89. Detonating,             | 18. Permutation—             |
| 2. Bag,                     | 56. Dials,                   |
| 90. Bicycle,                | 55. Hasp,                    |
| 4. Car-seat,                | 66. Keyhole-guards,          |
| 46. Cylinder,               | 58. Knob-pins,               |
| 91. Cylinder knob—          | 57. Operating-handle,        |
| 92. Multiple-key,           | 54. Push-pin,                |
| 50. Electric—               | 53. Rotating tumblers,       |
| 63. Combination,            | 60. Sliding tumblers,        |
| 62. Time,                   | 59. Spindles,                |
| 5. Hasp,                    | 67. Tilt-locks,              |
| 6. Indicator,               | 94. Seal-bolts.              |
| 74. Multiple-bolt,          | 98. Seals—                   |
| 69. Multiple-key—           | 99. Automatic-catch,         |
| 70. Adjustable tumbler,     | 100. Box and bag,            |
| 71. Master-key,             | 101. Box-strap.              |
| 73. Trap,                   | 24. Shackles.                |
| 20. Piano,                  | 102. Sliding-door fasteners. |
| 47. Pico—                   | 103. Trunk-fasteners.        |
| 93. Multiple-key,           |                              |

## DIVISION XX.—CONTINUED.

### CLASS 100.—SAFES. (XX.)

#### *Sub-classes.*

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1. Burglar-proof.</li> <li>4. Circular-door.</li> <li>5. Express.</li> <li>2. Fireproof.</li> <li>6. Gas and explosives.</li> <li>11. Pressure mechanism.</li> </ul> | <ul style="list-style-type: none"> <li>3. Safe bolt-work—</li> <li>9. Automatic,</li> <li>10. Filling. <small>HOPE 112</small></li> <li>7. Safety-deposit.</li> <li>12. Safety-deposit boxes.</li> <li>8. Water and air.</li> </ul> |
|---|---|

### CLASS 27.—UNDERTAKING. (XX.)

#### *Sub-classes.*

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. Biers.</li> <li>2. Burial apparatus—</li> <li>5. Grave-fillers,</li> <li>6. Raising and lowering.</li> <li>3. Coffins—</li> <li>10. Brackets,</li> <li>11. Corners,</li> <li>12. Fasteners,</li> <li>13. Head-rests,</li> <li>14. Lids,</li> </ul> | <ul style="list-style-type: none"> <li>Coffins—</li> <li>15. Life-signals,</li> <li>16. Linings and coverings,</li> <li>7. Metallic,</li> <li>8. Plastic material,</li> <li>17. Shields,</li> <li>9. Wooden.</li> <li>4. Embalming—</li> <li>18. Apparatus,</li> <li>19. Processes.</li> </ul> |
|--|--|

# DIVISION XXI.

## EXAMINER HAINS.

CLASSES.—13, Brakes and Gins; 19, Carding; 26, Cloth-Finishing; 28, Cordage; 38, Felt and Fur; 66, Knitting and Netting; 117, Silk; 118, Spinning; 139, Weaving.

### CLASS 13.—BRAKES AND GINS. (XXI.)

#### Sub-classes.

- |                            |                            |
|----------------------------|----------------------------|
| 10. Delinting cotton-seed. | 3. Hair pickers.           |
| 1. Gin attachments.        | 4. Oakum machines.         |
| 11. Gin brushes.           | 5. Processes.              |
| 17. Gin condensers.        | 6. Reciprocating brakes.   |
| 12. Gin feeders—           | 7. Roller-gins.            |
| 19. Pneumatic.             | Rotary brakes—             |
| 13. Gin ribs.              | 16. Breakers and crushers, |
| 20. Gin rollers.           | 17. Rotary brakes,         |
| 14. Gin saws.              | 18. Scutchers.             |
| 15. Gin saw cleaners.      | 9. Saw gins.               |
| 2. Hackling machines.      |                            |

### CLASS 19.—CARDING. (XXI.)

#### Sub-classes.

- |                                     |                               |
|-------------------------------------|-------------------------------|
| 16. Balbing heads.                  | 14. Fleece removers.          |
| 1. Burring.                         | 8. Lapping.                   |
| 2. Card clothing.                   | 19. Opener beaters.           |
| 3. Carding.                         | 20. Opener evening mechanism. |
| 5. Coilers.                         | 9. Pickers.                   |
| 17. Comb dabbing mechanism.         | 21. Screens.                  |
| 6. Combing—                         | 25. Stopping.                 |
| 24. Circle combs.                   | 15. Stripping mechanism.      |
| 12. Covering yarn.                  | 23. Traveling flat cards.     |
| 22. Cylinders and rollers.          | 10. Wadding.                  |
| 18. Dust trunks.                    | 11. Wool oiling.              |
| 7. Feeding cards.                   |                               |
| 13. Fleece dividers and condensers. |                               |

### CLASS 26.—CLOTH-FINISHING. (XXI.)

#### Sub-classes.

- |                                     |                            |
|-------------------------------------|----------------------------|
| 10. Beetling.                       | 5. Pressing.               |
| 11. Calendering.                    | 13. Rigging.               |
| 9. Cutting lace and looped fabrics. | 6. Shearing.               |
| 2. Finishing.                       | 14. Singeing.              |
| 12. Finishing cut pile fabrics.     | 15. Sizing.                |
| 3. Folding.                         | 7. Sponging.               |
| 18. Guiding.                        | 8. Stretching.             |
| 4. Napping.                         | 16. Stretching and drying. |
|                                     | 17. Winding.               |

### CLASS 28.—CORDAGE. (XXI.)

#### Sub-classes.

- |                                |                                       |
|--------------------------------|---------------------------------------|
| 23. Balls.                     | 12. Spools.                           |
| 2. Banding.                    | 13. Tassels.                          |
| 3. Bobbin supporters.          | 14. Warping.                          |
| 4. Braiding.                   | 30. Warping reeds.                    |
| 24. Braiding carriers.         | 31. Warping stop motions.             |
| 25. Braids.                    | 32. Winding balls.                    |
| 21. Cord and rope machines.    | Winding bobbins—                      |
| 5. Cords and ropes.            | 17. Sewing machine shuttle,           |
| 6. Covering cord.              | 15. Warp wind.                        |
| 7. Finishing yarn and thread.  | 16. Weft wind.                        |
| 27. Fuse and packing machines. | 22. Winding heddle and seine-needles. |
| 29. Lease formers.             | 18. Winding spools.                   |
| 9. Packaging braid and yarn.   | 19. Winding tatting shuttles.         |
| 10. Reels.                     | 20. Yarn guides and clearers.         |
| 11. Separating rope.           |                                       |

### CLASS 38.—FELT AND FUR. (XXI.)

#### Sub-classes.

- |                      |                     |
|----------------------|---------------------|
| 7. Fabrics.          | 10. Forming bats.   |
| 8. Felting machines. | 11. Fulling.        |
| 9. Flock cutting.    | 12. Furs and pelts. |

### CLASS 66.—KNITTING AND NETTING. (XXI.)

#### Sub-classes.

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| 1. Burrs and sinkers.             | 6. Netting.                       |
| Circular—                         | 7. Stopping.                      |
| 2. Circular machines,             | Straight—                         |
| 18. Independent needles,          | 15. Cams and stops,               |
| 11. Looper pin and hook machines. | 13. Fashioning-machines,          |
| 17. Crocheting.                   | 14. Looper pin and hook machines, |
| 3. Darning.                       | 8. Straight machines,             |
| 4. Fabrics.                       | 16. Warp-machines.                |
| 12. Feeding.                      | 9. Take-ups and tensions.         |
| 5. Needles.                       | 10. Tatting.                      |

### CLASS 117.—SILK. (XXI.)

#### Sub-classes.

- |                 |                |
|-----------------|----------------|
| 1. Assorting.   | 5. Silk.       |
| 2. Cleaning.    | 6. Stretching. |
| 3. Cocooneries. | 7. Throwing.   |
| 4. Doubling.    | 8. Winding.    |

### CLASS 118.—SPINNING. (XXI.)

#### Sub-classes.

- |                             |                                   |
|-----------------------------|-----------------------------------|
| 1. Bobbin and cop builders. | 11. Rings and travelers.          |
| 2. Bobbins.                 | 27. Spindles and appurtenances.   |
| 26. Clearers.               | Spindles and bearings—            |
| 4. Cop tubes.               | 18. Bolsters,                     |
| 30. Covering yarn.          | 19. Combined bearings,            |
| 5. Domestic.                | 20. Sleeve whirles and standards, |
| 6. Doubling.                | 25. Spindles and bearings,        |
| 7. Drawing and evening.     | 21. Steps.                        |
| 23. Drawing rollers.        | 24. Spindle driving devices.      |
| 17. Drawing stop mechanism. | 12. Stopping.                     |
| 28. Drawing trumpets.       | 22. Top roll saddles.             |
| 29. Fliers.                 | 13. Throstles and caps.           |
| 8. Hemp, flax, and hair.    | 14. Twisting-heads.               |
| 9. Mulee and jacks.         | 16. Yarn controllers.             |
| 10. Ring frames.            |                                   |

### CLASS 139.—WEAVING (XXI.)

#### Sub-classes.

- |                                  |                            |
|----------------------------------|----------------------------|
| 47. Bag-turning machines.        | Looms—                     |
| 5. Carpet-rag loopers.           | 68. Swivel,                |
| 6. Chenille.                     | 39. Wire.                  |
| 40. Chenille-machines.           | 42. Pattern-chains.        |
| 8. Cross-weaving.                | 22. Picker-checks.         |
| 50. Cutting double pile fabrics. | 21. Pickers.               |
| 67. Driving and lay motions.     | 24. Reeds and reed-making. |
| Fabrics—                         | 25. Shedding.              |
| 70. Elastic.                     | Shuttles—                  |
| 9. Fabrics,                      | 44. Cop-cell and cover,    |
| 71. Pile,                        | 45. Float-detecting,       |
| 72. Tubular.                     | 46. Guides and tensions,   |
| 41. Fringe-machines.             | 27. Shuttles.              |
| 10. Fringes.                     | 28. Shuttle-boxes.         |
| 13. Heddle-machines.             | 29. Shuttle-checks.        |
| 14. Heddles.                     | 30. Shuttle-guards.        |
| 16. Jacquard mechanism.          | Shuttle-motions—           |
| Looms—                           | 48. Fly,                   |
| 1. Bag,                          | 49. Positive,              |
| 2. Basket,                       | 69. Pneumatic.             |
| 3. Buttonhole,                   | 43. Shuttle-threaders.     |
| 7. Circular,                     | 33. Special machines.      |
| 11. Hair-cloth,                  | Stopping—                  |
| 12. Hand,                        | 51. Protector mechanism,   |
| 15. Irregular,                   | 52. Stopping,              |
| 17. Lappet,                      | 53. Warp-stop motions,     |
| 18. Looms,                       | 54. Weft-stop motions.     |
| 19. Narrow-ware,                 | Take-ups and let-offs—     |
| 20. Needle,                      | 56. Beams,                 |
| Pile-fabric—                     | 57. Escapement let-offs,   |
| 62. Longitudinal wires,          | 58. Friction let-offs,     |
| 23. Pile fabric,                 | 59. Let-offs,              |
| 63. Pile-wires,                  | 60. Take-ups,              |
| 64. Pile-wire motions,           | 61. Take-ups and let-offs. |
| 65. Terry,                       | 36. Temples.               |
| 66. Tufted,                      | 37. Tying-in warps.        |
| 32. Slat, cane, and straw,       | 38. Weft-forks.            |



# DIVISION XXII.

## EXAMINER SEATON.

CLASSES.—9, Boats; 42, Firearms; 43, Fishing and Trapping; 115, Marine Propulsion; 89, Ordnance; 102, Projectiles; 114, Ships; 116, Signals.

### CLASS 9.—BOATS. (XXII.)

#### Sub-classes.

- |                                       |                           |
|---------------------------------------|---------------------------|
| 2. Building.                          | 6. Life-preservers.       |
| 3. Buoys and safes.                   | 7. Oars and oar-locks.    |
| 4. Detaching, hoisting, and lowering. | 8. Rafting and booming.   |
| 5. Life boats and rafts.              | 9. Sectional and folding. |
|                                       | 10. Swimming appliances.  |

### CLASS 42.—FIREARMS. (XXII.)

#### Sub-classes.

- |  |  |
|--|--|
| 25. Ball-traps.  | Guns—  |
| 3. Bayonets.   | Magazine—  |
| 5. Bows and cross-bows.                                  | C. Barrel tilting up at muzzle,  |
| 8. Catapults.  | D. Barrel hinged to stock,   |
| 28. Cartridge-holders. Temporary                         | E. Barrel swinging laterally on vertical pin,                                    |
| 26. Electrical appliances.                               | F. Barrel rotating on parallel pin,  |
| Guns—  | G. Longitudinally-reciprocating breech-bolt, (spring-impelled firing-pin.)       |
| 1. Air and spring,                                       | H. Same, with firing-pin impelled by rotating hammer,                            |
| 4. Blow,   | I. Breech-block swinging upward and forward,                                     |
| Breech-loading—  | J. Breech-block swinging laterally forward,                                      |
| A. Barrel sliding forward,                               | K. Breech-block swinging backward and downward,                                  |
| B. Barrel tilting up at breech,                          | L. Breech-block swinging on center or trunnions,                                 |
| C. Barrel tilting up at muzzle,                          | M. Breech-block swinging upward and backward,                                    |
| D. Barrel hinged to stock,                               | N. Breech-block swinging laterally backward,                                     |
| E. Barrel swinging laterally on vertical pin,            | O. Breech-block swinging downward and backward,                                  |
| F. Barrel rotating on parallel pin,                      | P. Breech-block swinging on longitudinal pin or hinge,                           |
| H. Breech-block drawn back by hand or lever, (bolt-gun.) | Q. Breech-block sliding vertically in mortise,                                   |
| I. Breech-block swinging upward and forward,             | R. Breech-block sliding laterally in mortise,                                    |
| J. Breech-block swinging laterally forward,              | S. Faucet breech-block, chambered,   |
| K. Breech-block swinging backward and downward,          | T. Rotating carrier, filled from a fixed magazine and discharged in the carrier. |
| L. Breech-block swinging on center or trunnions,         | 9. Gun-barrels.  |
| M. Breech-block swinging upward and backward,            | 10. Gun-trimmings.   |
| N. Breech-block swinging laterally backward,             | 11. Implements.  |
| O. Breech-block swinging downward and backward,          | 12. Locks.   |
| P. Breech-block swinging on longitudinal pin or hinge,   | 27. Muzzle-loaders.  |
| Q. Breech-block sliding vertically in mortise,           | 15. Nipples and guards.  |
| R. Breech-block sliding laterally in mortise,            | 16. Pistol-swords.   |
| S. Faucet breech-block, chambered,                       | 18. Revolvers—   |
| T. Faucet breech-block with chamber in front,            | 29. Locks.   |
| U. Rotating sleeve on barrel,                            | 19. Rifling.   |
| V. Gas-operated,   | 20. Sights.  |
| W. Recoil-operated,                                      | 21. Stocks.  |
| 7. Cane,   | 22. Targets—   |
| Magazine—  | 24. Flying.  |
| A. Barrel sliding forward,                               | 23. Toy pistols.   |
| B. Barrel tilting up at breech,                          |  |

### CLASS 43.—FISHING AND TRAPPING. (XXII.)

#### Sub-classes.

- |                             |                            |
|-----------------------------|----------------------------|
| 2. Decoys.                  | Insect-destroyers—         |
| Fishing—                    | 5. Fumigators.             |
| 3. Fishways,                | 8. Moth-exterminators,     |
| 4. Floats,                  | 14. Powder-dusters.        |
| 6. Harpoons and spears,     | Traps—                     |
| 7. Hooks,                   | 18. Bedbug,                |
| 9. Nets and seines,         | 19. Cage,                  |
| 10. Oyster-culture,         | 20. Fish,                  |
| 11. Oyster-dredges,         | 21. Impalement,            |
| 12. Oyster rakes and tongs, | 22. Insect,                |
| 13. Pisciculture,           | 23. Jaw,                   |
| 15. Reels,                  | 24. Self-set and ever-set, |
| 16. Rods,                   | 25. Sporting,              |
| 17. Sinkers.                | 26. Victim-set,            |
| Insect-destroyers—          | 27. Wire-cboker.           |
| 1. Catchers,                |                            |

### CLASS 115.—MARINE PROPULSION. (XXII.)

#### Sub-classes.

- |                             |  |
|-----------------------------|--|
| Paddle-wheels—              | Propelling—                              |
| 4. Feathering-blades,       | 12. Reciprocating propellers,            |
| 22. Fitting and driving,    | 10. Steering-propellers, (except screw.) |
| 23. Form and construction.  | Screw-propellers—                        |
| Propelling—                 | 15. Fitting and driving,                 |
| 1. Buoyant propellers,      | 16. Form and construction,               |
| 2. Chain-propellers,        | 17. Steering.                            |
| 3. Crank-paddles,           | Towing—                                  |
| 6. Hydraulic propellers,    | 18. External power,                      |
| 21. Motion of vessel,       | 19. Internal power.                      |
| 24. Oscillating propellers, | 13. Wheels in channel.                   |
| 8. Pneumatic propellers,    |  |

### CLASS 89.—ORDNANCE. (XXII.)

#### Sub-classes.

- |                            |                          |
|----------------------------|--------------------------|
| 26. Body-structure.        | 9. Machine-guns.         |
| 1. Breech-loading—         | 10. Mortars.             |
| 25. Gas-operated.          | 12. Operating.           |
| 24. Recoil-operated.       | 22. Pneumatic.           |
| 2. Carriages.              | 29. Practice-barrels.    |
| 19. Cartridge-feed cases.  | 13. Shields.             |
| 3. Counterpoise-carriages. | 28. Sights.              |
| 4. Disabling.              | 15. Submarine guns.      |
| 21. Electrical appliances. | 16. Tompions and valves. |
| 27. Gas-checks.            | 17. Trunnions.           |
| 7. Loading.                | 18. Vents and stoppers.  |
| 20. Locks.                 |                          |

# DIVISION XXII.—CONTINUED.

## CLASS 102.—PROJECTILES. (XXII.)

### Sub-classes.

- |                           |                         |
|---------------------------|-------------------------|
| 21. Blasting-cartridges.  | 7. Flasks and chargers. |
| 22. Blasting-fuses.       | 8. Lubricating.         |
| 23. Blasting implements.  | 9. Marine torpedoes.    |
| 2. Bomb-lances.           | 11. Primers.            |
| 3. Cap-boxes.             | 12. Projectiles.        |
| 4. Cap-filling.           | 13. Rockets.            |
| 19. Cartridge implements. | 14. Sabots and wads.    |
| 5. Cartridge-loading.     | 15. Shells.             |
| 6. Cartridges—            | 16. Shell-fuses.        |
| 20. Electric.             | 18. Torpedoes.          |

## CLASS 114.—SHIPS. (XXII.)

### Sub-classes.

- |                                   |                                |
|-----------------------------------|--------------------------------|
| 1. Anchors.                       | 30. Light and air ports.       |
| 2. Anchor-trippers.               | 32. Masts and spars.           |
| 3. Armor-clad.                    | 46. Oil-distributors.          |
| 4. Ballasting.                    | 33. Raising sunken vessels.    |
| 5. Berths, cabins, and furniture. | 34. Reefing and furling sails. |
| 6. Bilge-water. Discharging       | 35. Sails and rigging.         |
| 9. Building.                      | 36. Scows.                     |
| 10. Cables and cable-stoppers.    | 37. Scuppers and hawse-holes.  |
| 51. Camels and floating docks.    | 38. Steamboat-chimneys.        |
| 14. Centerboards and keels.       | 39. Steering mechanism—        |
| 15. Cleats and belaying-pins.     | 47. Hydraulic,                 |
| 16. Couplings and tow-lines.      | 48. Pneumatic,                 |
| 18. Decks and hatches.            | 50. Rudders,                   |
| 52. Fenders and torpedo-guards.   | 49. Wheels and channels.       |
| 19. Fire-extinguishers.           | 40. Submarine and torpedo.     |
| 22. Form.                         | 41. Surge-relievers.           |
| 23. Gangways and bridges.         | 42. Travelers.                 |
| 24. Hanks, cringles, and hoops    | 43. Turrets.                   |
| 26. Ice boats and breakers.       | 44. Valve and port stoppers.   |
| 27. Implements.                   | 45. Ventilating.               |
| 29. Leak-stoppers.                |                                |

## CLASS 116.—SIGNALS. (XXII.)

### Sub-classes.

- |                    |                         |
|--------------------|-------------------------|
| 1. Alarms—         | 12. Flag-staff holders. |
| Burglar—           | 31. Indicators—         |
| 41. Combined,      | 45. Barbers' turns,     |
| 42. Detonating,    | 51. Game-counters,      |
| 43. Miscellaneous, | 46. Identity,           |
| 44. Ringing,       | 47. Office,             |
| 11. Fire,          | 48. Peg,                |
| 15. Leak,          | 49. Rotary,             |
| 23. Shoal.         | 50. Sliding,            |
| 32. Annunciators.  | 52. Station.            |
| 33. Bells—         | 22. Semaphores.         |
| 34. Call,          | Signals—                |
| 35. Door,          | 9. Car,                 |
| 36. Letter-box,    | 13. Fog,                |
| 37. Sleigh.        | 18. Nautical,           |
| 38. Bell-hanging—  | 19. Pneumatic,          |
| 39. Pulls,         | 20. Pyrotechnic.        |
| 40. Ringing.       | 26. Speaking-tubes.     |

# DIVISION XXIII.

EXAMINER A. P. GREELEY.

CLASSES.—181, Acoustics; 33, Drafting; 58, Horology; 73, Measuring-Instruments.

## CLASS 181.—ACOUSTICS. (XXIII.)

### Sub-classes.

- |                  |                           |
|------------------|---------------------------|
| 1. Audiphones.   | 6. Graphophone-tablets.   |
| 2. Ear-trumpets. | 3. Mechanical telephones. |
| 4. Graphophones. | 5. Miscellaneous.         |

## CLASS 33.—DRAFTING. (XXIII.)

### Sub-classes.

- |                           |                   |
|---------------------------|-------------------|
| 13. Beam-compasses.       | 8. Plotters.      |
| 1. Calipers and dividers. | 12. Protractors.  |
| 2. Curve-scribers.        | 9. Scribes.       |
| 5. Ellipsographs.         | 10. Stair-curves. |
| 6. Pantographs.           | 14. T-squares.    |
| 7. Parallel-rulers.       |                   |

## CLASS 58.—HOROLOGY. (XXIII.)

### Sub-classes.

- |                           |                         |
|---------------------------|-------------------------|
| 8. Balance-escapements.   | 15. Time-alarms.        |
| 3. Clocks—                | 16. Time-checks.        |
| 2. Calendar,              | 31. Time lamp-lighters. |
| 23. Electric,             | 33. Time-signals.       |
| 9. Geographical,          | 17. Watches.            |
| 29. Pneumatic.            | 18. Watch-balances—     |
| 4. Clock-cases.           | 19. Barrels,            |
| 5. Clock-striking.        | 20. Cases,              |
| 6. Clock-winding.         | 21. Case-springs,       |
| 34. Dials and hands.      | 22. Dust-caps,          |
| 10. Metronomes.           | 23. Keys,               |
| 11. Pendulums.            | 24. Plates,             |
| 35. Pendulum-escapements. | 25. Regulators,         |
| 30. Repeaters.            | 26. Stops.              |
| 12. Safety-wheels.        | 32. Watchmakers' tools. |
| 13. Stem-winders.         | 27. Watch-winding.      |
| 14. Sun-dials.            |                         |

## CLASS 73.—MEASURING-INSTRUMENTS. (XXIII.)

### Sub-classes.

- |                              |                                  |
|------------------------------|----------------------------------|
| 2. Anemometers.              | Meters—                          |
| 3. Balances—                 | 68. Proportional,                |
| 101. Electrical attachments, | 37. Rotary,                      |
| 99. Equal arms,              | 45. Spirit.                      |
| 102. Pick-up weights,        | 27. Odometers.                   |
| 100. Recording.              | 80. Pitch-boards.                |
| 4. Barometers.               | 81. Planimeters.                 |
| 5. Bathometers.              | 72. Plumb-bobs.                  |
| 6. Bevels.                   | 31. Pressure-gages—              |
| 7. Calculators—              | 109. Bourdon,                    |
| 84. Tabular.                 | 110. Diaphragm,                  |
| Calipers—                    | 111. Piston.                     |
| 105. Dial.                   | 33. Rain-gages.                  |
| 106. Stem.                   | 34. Recorders—                   |
| 86. Cash-registers—          | 89. Fare,                        |
| 87. Rotating indicators.     | 88. Manual,                      |
| 9. Cloth-measuring machines. | 90. Passenger,                   |
| 10. Coin-counters.           | 91. Pressure,                    |
| 83. Coin-packages.           | 92. Speed,                       |
| 11. Coin-testers.            | 93. Steam-engine indicator.      |
| 73. Conformators.            | 123. Registering ballot-boxes.   |
| 13. Dividing-engines.        | 35. Registers—                   |
| 15. Dynamometers.            | 59. Fare,                        |
| 16. Gages—                   | 17. Game,                        |
| 107. Depth,                  | 58. Passenger.                   |
| 77. Micrometer,              | Scales—                          |
| 66. Surface,                 | 39. Beams,                       |
| 108. Thickness,              | 8. Cart,                         |
| 67. Track.                   | 23. Hydrostatic,                 |
| 19. Grain-meters—            | 41. Pans,                        |
| 97. Double-trap bottom,      | 29. Pendulum,                    |
| 94. Oscillating,             | 121. Platform,                   |
| 96. Positively-actuated,     | 104. Price,                      |
| 78. Rotating,                | 38. Sack,                        |
| 95. Twin buckets.            | 46. Spring.                      |
| 20. Grain-tallies.           | 69. Ships' logs.                 |
| 22. Hydrometers.             | 113. Spacing-instruments.        |
| 24. Hygrometers.             | 42. Specific-gravity apparatus.  |
| 79. Lactometers.             | 44. Sphygmoscopes.               |
| 63. Leather-measuring.       | 112. Spirometers.                |
| Levels—                      | 47. Squares—                     |
| 71. Plumb,                   | 115. Center,                     |
| 70. Spirit.                  | 116. Folding.                    |
| Measures—                    | 103. Steelyards.                 |
| 36. Rotary,                  | 117. Telemetry.                  |
| 40. Scale,                   | 50. Testing illuminating-fluids. |
| 64. Shoemakers',             | 51. Testing-machines.            |
| 43. Speed,                   | 52. Thermometers—                |
| 48. Tailors',                | 118. Metallic,                   |
| 49. Tape.                    | 119. Oven,                       |
| 60. Measuring-faucets.       | 32. Pyrometers,                  |
| 61. Measuring-pumps.         | 85. Telethermometers.            |
| 62. Measuring-vessels.       | 21. Tollers.                     |
| Meters—                      | 120. Ullage-rods.                |
| 1. Air and gas,              | 53. Voting-machines.             |
| 12. Diaphragm,               | 54. Water-gages—                 |
| 98. Disk.                    | 82. Float.                       |
| 28. Oscillating,             | 55. Weather-vanes.               |
| 30. Piston,                  | 56. Weights.                     |

# DIVISION XXIV.

EXAMINER PIERCE.

CLASSES.—2, Apparel; 29, Crinoline and Corsets; 112, Sewing-Machines; 132, Toilet; 135, Umbrellas and Canes; 165, DESIGNS.

## CLASS 2.—APPAREL. (XXIV.)

### Sub-classes.

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 34. Armpit-shields.             | 33. Hat-ventilators.            |
| 30. Bonnets.                    | 38. Muffs and mufflers.         |
| 1. Capes and sbawls.            | 11. Neckties.                   |
| 53. Coat-hangers.               | 28. Needles.                    |
| 2. Coats and vests.             | 39. Needle-threaders.           |
| 3. Collars and cuffs.           | 40. Nether garments.            |
| 35. Combination garments.       | 13. Pin and needle cases.       |
| 46. Curling hat-brims.          | 14. Pinking.                    |
| 4. Cutting.                     | 16. Plaiting.                   |
| 36. Darning-lasts.              | 15. Pockets.                    |
| 5. Diapers.                     | 18. Sewing.                     |
| 6. Embroidery-patterns.         | 41. Shirts.                     |
| 37. Garment-protectors.         | 20. Skirt-elevators.            |
| 8. Garters and belts.           | 42. Skirts.                     |
| 9. Gloves.                      | 23. Stockings.                  |
| 10. Handkerchiefs.              | 22. Stretchers and formers.     |
| 47. Hatblockingand stretching.  | 43. Supplemental bosoms.        |
| 48. Hat-blocks.                 | 25. Tailoring.                  |
| 49. Hat brushing and finishing. | 29. Thimbles.                   |
| 50. Hat-ironing.                | 44. Thread holders and cutters. |
| 51. Hat-pouneing.               | 26. Trimmings.                  |
| 52. Hat-pressing.               | 27. Work-boxes.                 |
| 31. Hats and caps.              | 45. Work-holders.               |
| 32. Hat-sweats.                 |                                 |

## CLASS 29.—CRINOLINE AND CORSETS. (XXIV.)

### Sub-classes.

- |                      |                      |
|----------------------|----------------------|
| 1. Bustles.          | 10. Shoulder-braces. |
| 3. Corsets.          | 7. Skirt-machines.   |
| 4. Hoops and clasps. | 9. Stays.            |
| 5. Hoop-skirts.      | 8. Underwaists.      |
| 6. Pads.             |                      |

## CLASS 112.—SEWING-MACHINES. (XXIV.)

### Sub-classes.

- |                               |                                |
|-------------------------------|--------------------------------|
| 35. Attachment-holders.       | 17. Running-stitch.            |
| 1. Binders.                   | 18. Setters and threaders.     |
| 41. Book-sewing.              | 31. Sewing hats.               |
| 3. Braiders and corders.      | 19. Sewing looped fabrics.     |
| 43. Broom-sewing.             | 32. Sewing on buttous.         |
| 4. Buttonhole.                | 42. Sewing rugs.               |
| 5. Chain and double chain.    | 20. Sewing shoes.              |
| 7. Embroidering.              | 21. Short-thread.              |
| 8. Feeding.                   | 22. Shuttle-machines.          |
| 36. Glove-sewing machines.    | 23. Shuttles and bobbins.      |
| 9. Guides.                    | 24. Special machines.          |
| 10. Hemmers.                  | 25. Straw.                     |
| 34. Methods.                  | 26. Take-ups.                  |
| 29. Miscellaneous parts.      | 39. Tensions.                  |
| 11. Needles.                  | 33. Thread-cutters.            |
| 37. Needle-clamps.            | 6. Trimmers.                   |
| 13. Presser-feet and lifters. | 27. Tuck creasers and markers. |
| 14. Quilting.                 | 12. Tucking-guides.            |
| 38. Revolving hooks.          | 40. Turning fabrics.           |
| 15. Revolving-hook machines.  | 28. Wax-thread.                |
| 16. Rufflers and gatherers.   |                                |

## CLASS 132.—TOILET. (XXIV.)

### Sub-classes.

- |                          |                           |
|--------------------------|---------------------------|
| 3. Combs.                | 9. Nail and ear cleaners. |
| 4. Crimping and curling. | 14. Pins.                 |
| 5. Hair-pins.            | 15. Shaving-cups.         |
| 6. Hair and wigs.        | 11. Toilet-cases.         |
| 8. Mustache-guards.      | 12. Toothpicks.           |

## CLASS 135.—UMBRELLAS AND CANES. (XXIV.)

### Sub-classes.

- |                                |                               |
|--------------------------------|-------------------------------|
| 2. Canes.                      | 9. Runners and notches.       |
| 3. Combined cane and umbrella. | 10. Tip-cups.                 |
| 4. Covers.                     | 13. Umbrellas, Folding—       |
| 5. Drip cups.                  | 14. Self opening and closing. |
| 7. Handles and sticks.         | 12. Supporters.               |
| 8. Ribs and stretchers.        |                               |

## CLASS 165.—DESIGNS. (XXIV.)

The sub-classes conform as nearly as possible to those of the mechanical classes.

# DIVISION XXV.

EXAMINER WYNNE.

CLASSES.—166, Artesian and Oil Wells; 17, Butchering; 83, Mills; 125, Stone-Working; 130, Thrashing; 146, Vegetable Cutters and Crushers.

## CLASS 166.—ARTESIAN AND OIL WELLS. (XXV.)

### Sub-classes.

- |                         |                         |
|-------------------------|-------------------------|
| 1. Casing-heads.        | Earth-augers—           |
| 2. Cleaning.            | 13. With carriers.      |
| 3. Drilling and boring. | 6. Reamers.             |
| 4. Drill-jars.          | 10. Snicker-rods.       |
| 5. Drill-rod grabs.     | 7. Tube-clamps.         |
| 11. Earth augers—       | 8. Tamping and packing. |
| 12. Bits,               | 9. Walking-beams.       |

## CLASS 17.—BUTCHERING. (XXV.)

### Sub-classes.

- |                             |                                  |
|-----------------------------|----------------------------------|
| 8. Butchers' stalls.        | Meat-cutters—                    |
| 9. Chopping-blocks.         | 22. Hand,                        |
| Dressing—                   | 23. Rocking-knife,               |
| 10. Fish-dressing machines, | 24. Slicers,                     |
| 11. Hog-scraping machines,  | 25. Trip mechanism.              |
| 12. Intestine-cleaners,     | 26. Meat-mixers.                 |
| 13. Skinning.               | Meat-tenderers—                  |
| 14. Meat clamps.            | 27. Hand,                        |
| Meat-cutters—               | 28. Pivoted-head,                |
| 16. Cracklings,             | 29. Rotary.                      |
| 17. Crank mechanism,        | 6. Sausage-machines.             |
| 18. Cube,                   | 7. Scalding and singeing.        |
| 19. Cylinder and block,     | 30. Slaughtering, elevating, and |
| 20. Cylinder and concave,   | suspending.                      |
| 21. Double-cylinder,        |                                  |

## CLASS 83.—MILLS. (XXV.)

### Sub-classes.

- |                                |                              |
|--------------------------------|------------------------------|
| Amalgamators—                  | Grinding-mills—              |
| 65. Electric,                  | 13. Cone and shell,          |
| 66. Lead,                      | 12. Crushing-rolls,          |
| 67. Mercury,                   | 14. Cylinder and concave,    |
| 68. Plate,                     | 7. Disk-action, Horizontal   |
| 69. Vacuum,                    | 8. Disk-action, Vertical     |
| 70. Vapor.                     | 44. Feed regulators,         |
| Bagging grain—                 | 15. Grain-samplers,          |
| 26. Bag-holders.               | 16. Grist-alarms,            |
| Chop-graders—                  | 23. Hominy,                  |
| 50. Bran-dusters, Beaters      | 46. Impact pulverizers,      |
| 51. Bran-dusters, Brushes      | 6. Knife-action,             |
| 49. Electric purifiers,        | 1. Mill-spindles,            |
| 42. Flour processes,           | 3. Millstone-dress,          |
| 40. Gravity,                   | 4. Millstone-exhaust,        |
| 39. Rotary bolts,              | 2. Millstone-trams,          |
| 38. Shaking bolts.             | 22. Paint,                   |
| Dnst-collectors—               | 11. Rotary beaters.          |
| 47. Reciprocating,             | Ore and coal—                |
| 48. Rotating.                  | 52. Coal-breakers,           |
| Grain-scourers—                | 53. Crushers,                |
| 32. Centrifugal,               | 63. Ice-crushers,            |
| 36. Concave face,              | 62. Ice picks and shavers,   |
| 31. Conical,                   | Separators—                  |
| 30. Cylinder, Horizontal       | 54. Dry,                     |
| 29. Cylinder, Vertical         | 58. Jiggers,                 |
| 37. Disk-face,                 | 71. Magnetic,                |
| 33. Pestle-action,             | 59. Washers,                 |
| 35. Reciprocating and endless, | 56. Sifters and screens—     |
| 34. Screw-action.              | 60. Household,               |
| Grinding-mills—                | 57. Stamps.                  |
| 17. Balancing millstones,      | Preparing grain—             |
| 9. Ball and drum,              | 28. Processes,               |
| 21. Bark,                      | 27. Steaming and dampening.  |
| 45. Chasing,                   | 64. Steam-boiler and fluo    |
| 18. Coffee,                    | scrapers.                    |
| 10. Compound movement,         | 61. Sugar and salt crushers. |

## CLASS 125.—STONE-WORKING. (XXV.)

### Sub-classes.

- |                                  |                             |
|----------------------------------|-----------------------------|
| 2. Channeling-machines.          | 12. Millstone paint-staffs. |
| 3. Chucks for rock-drills.       | 13. Millstone-picks.        |
| 4. Diamond-tools.                | 14. Mining-machines.        |
| 5. Dressing slate.               | 15. Monuments.              |
| 6. Dressing stone.               | 18. Sawing stone.           |
| 10. Drills.                      | 19. Tools.                  |
| 11. Millstone-dressing machines. |                             |

## CLASS 130.—THRASHING. (XXV.)

### Sub-classes.

- |                                 |                              |
|---------------------------------|------------------------------|
| 1. Band-cutters and feeders.    | Grain-separators—            |
| 31. Cane-strippers.             | 16. Rotary screens,          |
| 2. Clover-hullers.              | 19. Screens and riddles,     |
| 3. Corn-cribs.                  | 15. Shaking screens.         |
| 4. Corn-husking implements.     | 14. Granaries and bins.      |
| 5. Corn-husking machines.       | Straw-carriers—              |
| Corn-shellers—                  | 21. Endless aprons,          |
| 6. Breast and cylinder,         | 22. Overhanging rakes,       |
| 7. Disk-action,                 | 23. Reels,                   |
| 9. Ear-grasping,                | 24. Shaking tables,          |
| 10. Implements,                 | 20. Stackers,                |
| 8. Peripheral action.           | 25. Vibrators,               |
| 12. Fans and regulators.        | 26. Walking-rakes.           |
| 13. Flax-threshers.             | Thrashing-machines—          |
| 32. Fruit and vegetable separa- | 27. Cylinder-machines,       |
| tors.                           | 29. Dnst-conveyers,          |
| Grain-separators—               | 28. Flail-machines,          |
| 17. Gravity,                    | 30. Vine and seed strippers. |
| 18. Oat, seed, and garlic,      |                              |

## CLASS 146.—VEGETABLE CUTTERS AND CRUSHERS.

(XXV.)

### Sub-classes.

- |                                  |                      |
|----------------------------------|----------------------|
| 8. Apple-parers.                 | Straw-cutters—       |
| 16. Bunching-machines.           | 20. Double-cylinder, |
| Crushers and graters—            | Pivoted-knife—       |
| 15. Reciprocating,               | 21. Rake-feed,       |
| 9. Rotary.                       | 22. Roller-feed,     |
| Cutters—                         | 23. Without feed,    |
| 12. Bread,                       | Rotary-wheel—        |
| 7. Reciprocating,                | 24. Follower-feed,   |
| 11. Rotary.                      | 25. Rake-feed,       |
| 2. Fruit-squeezers.              | 26. Roller-feed,     |
| 3. Nut-crackers.                 | 27. Without feed,    |
| 14. Peelers and washers.         | Single-cylinder—     |
| 6. Pitters, corers, and eye-cut- | 28. Rake-feed,       |
| ters.                            | 29. Roller-feed,     |
| 5. Seeders.                      | 30. Without feed,    |
| Straw-cutters—                   | Sliding-knife—       |
| Cutter and bed—                  | 31. Rake-feed,       |
| 17. Reciprocating-knife,         | 32. Roller-feed,     |
| 18. Rotary-cylinder,             | 33. Without feed.    |
| 19. Cylinder and concave,        |                      |

# DIVISION XXVI.

EXAMINER GEO. D. SEELY.

CLASSES.—173, Electricity: Conductors; 191, Electricity: Electric Railways; 171, Electricity: Generation; 174, Electricity: Medical and Surgical; 172, Electricity: Motive-Power.

## CLASS 173.—ELECTRICITY. CONDUCTORS. (XXVI.)

### Sub-classes.

- |                    |                             |
|--------------------|-----------------------------|
| 13. Conductors—    | 28. Insulators.             |
| 94. Lead-covered,  | 31. Lightning-rods.         |
| 70. Underground.   | 244. Machines for covering. |
| 14. Connectors.    | 43. Rheostats.              |
| 243. House-wiring. |                             |

## CLASS 191.—ELECTRICITY. ELECTRIC RAILWAYS.

(XXVI.)

### Sub-classes.

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| 17. Collapsible-tube conductor.       | Sectional conductor, connected—      |
| 1. Conductor supports and insulators. | 21. Mechanical closers,              |
| 2. Electric locomotives—              | 20. Traveling closers.               |
| 25. Electric control,                 | 3. Systems—                          |
| 26. Electromechanical control,        | 4. Battery,                          |
| 30. Motor on axle,                    | 8. Circuits. Series                  |
| 29. Pivoted motors,                   | 6. Closed-conduit,                   |
| 27. Single and multiple motor,        | 5. Conduit,                          |
| 28. Spring-mounted motors,            | 9. Converter,                        |
| 31. Traveling-dynamo.                 | 16. Distribution,                    |
| 15. General.                          | 11. Overhead—                        |
| 24. Motor part along the track.       | 12. Trolleys.                        |
| 18. Sectional conductor, connected—   | 22. Telfer and towing.               |
| 19. Magnetic closers,                 | 23. Trolley-operated track-switches. |

## CLASS 171.—ELECTRICITY. GENERATION. (XXVI.)

### Sub-classes.

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| Batteries—                       | Magneto-electric—                   |
| 73. Thermal.                     | 212. Uniform field.                 |
| 23. Friction-generators.         | 34. Meters.                         |
| 95. Galvanometers.               | 125. Pyro-magneto-electric devices. |
| Inductoriums—                    | Regulators—                         |
| 122. Induction-coils,            | 119. Alternating—                   |
| 123. Transformers. Rotary        | 241. Compounding.                   |
| 124. Transformers. Stationary    | 242. Inductive resistance.          |
| Magneto-electric—                | 221. Brush adjustment.              |
| Armatures—                       | 222. Circuit-interruption.          |
| 205. Disk.                       | 224. Compounding-machines.          |
| 206. Drum,                       | 223. Compound-winding.              |
| 207. Pole,                       | 225. Counter electromotive force.   |
| 208. Ring.                       | 226. Engine-control.                |
| 209. Bipolar.                    | 227. Magnetic reluctance.           |
| 210. Brushes and holders.        | 228. Reducing sparks.               |
| 211. Commutators and collectors. | 229. Resistance.                    |
| 118. Connecting devices.         | 230. Sectional winding.             |
| 76. Hand-machines.               | 97. Systems of distribution.        |
| 211. Multipolar.                 | 231. Transmitting mechanism.        |

## CLASS 174.—ELECTRICITY. MEDICAL AND SURGICAL.

(XXVI.)

### Sub-classes.

- |                            |                            |
|----------------------------|----------------------------|
| 87. Baths.                 | Medical and surgical—      |
| 88. Body-wear.             | 173. Combs and brushes,    |
| 89. Electrodes.            | 174. Electric soles,       |
| 177. Medical and surgical— | 175. Exercising apparatus, |
| 172. Chairs and couches,   | 170. Vaporizers.           |

## CLASS 172.—ELECTRICITY. MOTIVE-POWER. (XXVI.)

### Sub-classes.

- |                              |                             |
|------------------------------|-----------------------------|
| 15. Dental instruments.      | Motors—                     |
| 152. Elevators.              | 126. Reciprocating.         |
| 36. Motors—                  | 8. Steering and propulsion. |
| 130. Alternating—            | Transmission of power—      |
| 233. Condensers,             | 237. Alternating—           |
| 234. Distorted-field,        | 239. Direct,                |
| 235. Rotary-field,           | 238. Phase-modification,    |
| 236. Starters.               | 240. Reciprocating.         |
| 179. Hand-operating devices, |                             |

# DIVISION XXVII.

EXAMINER GOULD.

CLASSES.—15, Brushing and Scrubbing; 51, Grinding and Polishing; 68, Laundry; 141, Washing Apparatus.

## CLASS 15.—BRUSHING AND SCRUBBING. (XXVII.)

### Sub-classes.

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| 1. Blacking box and brush cases. | 8. Carpet-cleaners.                  |
| 18. Blacking-box holders.        | 60. Carpet-sweepers.                 |
| 61. Boot-blackening machines.    | Chimney-cleaners—                    |
| 2. Boot-cleaners.                | 41. Flue and stovepipe,              |
| 4. Broom-machines.               | 42. Lamp.                            |
| Brooms—                          | 43. Combined mop heads and wringers. |
| 19. Broom-heads,                 | 44. Combined scrubbers and mops.     |
| 20. Household,                   | 45. Dressing and assorting machines. |
| 21. Stable and yard,             | Fountain-brushes—                    |
| 22. Whisk.                       | 46. Blacking,                        |
| 23. Brush and broom bridles—     | 47. Broom,                           |
| 24. Handles,                     | 48. Hair,                            |
| 6. Supports.                     | 49. Paint,                           |
| 25. Brush-cleaners.              | 51. Scrubbers,                       |
| Brush heads and faces—           | 50. Shaving,                         |
| 26. Bath and flesh brushes,      | 52. Tooth,                           |
| 27. Brush and broom fiber,       | 53. Window-cleaners.                 |
| 28. Dusting-brushes,             | Holders—                             |
| 29. Hair-brushes,                | 54. Brush-head,                      |
| 30. Hat and clothes brushes,     | 55. Convertible mop and brush,       |
| 31. Horse-brushes,               | 56. Mop-heads.                       |
| 32. Metal-cleaning brushes,      | 57. Mops.                            |
| 33. Metallic tuft-fasteners,     | 12. Mop-wringers.                    |
| 34. Molds and molded backs,      | 14. Scrubbing-machines—              |
| 35. Nail-brushes,                | 15. Pails.                           |
| 36. Paint and whitewash brushes, | 58. Shoe-blackening stands.          |
| 37. Rotary brushes,              | 16. Shoe-brushes.                    |
| 13. Scrubbers,                   | 17. Street-sweepers.                 |
| 38. Shaving-brushes,             | 59. Window-cleaners.                 |
| 39. Tooth-brushes.               |                                      |
| 7. Brush-machines.               |                                      |
| 40. Brush-trimming machines.     |                                      |

## CLASS 68.—LAUNDRY. (XXVII.)

### Sub-classes.

- |                              |                                    |
|------------------------------|------------------------------------|
| 1. Bosom-boards.             | 29. Washboards.                    |
| 2. Clamps.                   | 30. Washboilers.                   |
| 34. Clothes-driers.          | 31. Washtubs.                      |
| 12. Clothes-line fasteners.  | Washing-machines—                  |
| 14. Clothes-line reels.      | 15. Agitator,                      |
| 3. Clothes-lines.            | 16. Boiler,                        |
| 5. Clothes-pounders.         | 17. Combined washing and wringing, |
| 6. Clothes sticks and tongs. | 18. Cylinder,                      |
| 7. Fluting-irons.            | 37. Miscellaneous,                 |
| 8. Hand-rubbers.             | 19. Pounder,                       |
| 19. Ironing-machines.        | 20. Reciprocating-rubber,          |
| 10. Ironing-tables.          | 21. Rocking and swinging,          |
| 11. Laundries.               | 22. Roller,                        |
| 13. Mangles.                 | 23. Roller and bed,                |
| 26. Sad-irons.               | 24. Rotary-rubber.                 |
| 27. Sad-iron holders.        | 32. Wringers.                      |
| 28. Starching-machines.      | 33. Wringer-rolls.                 |
| 35. Washbeaches.             |                                    |

## CLASS 51.—GRINDING AND POLISHING. (XXVII.)

### Sub-classes.

- |                                  |                                |
|----------------------------------|--------------------------------|
| 1. Abrading materials and tools. | Metal—                         |
| 17. Boots and shoes.             | 8. Mower and reaper knives,    |
| Glass and stone—                 | 9. Needle-eyes,                |
| 3. Curved surfaces,              | 10. Needles, rods, and points, |
| 11. Plane surfaces.              | 12. Plane surfaces,            |
| Metal—                           | 14. Rumbles,                   |
| 2. Card-grinding,                | 15. Sheet metal and wire,      |
| 4. Curved surfaces,              | 16. Strops, hones, and rifles. |
| 6. Cutlery-scourers,             | Wood—                          |
| 7. Edge-tools,                   | 5. Curved surfaces,            |
|                                  | 13. Plane surfaces.            |

## CLASS 141.—WASHING APPARATUS. (XXVII.)

### Sub-classes.

- |                                |                           |
|--------------------------------|---------------------------|
| 6. Barrel-washers.             | 10. Dish-cloth holders.   |
| 7. Bottle and can washers.     | 11. Dish-drainers.        |
| 9. Dish-cleaners.              | 12. Pitching casks.       |
| 8. Dish cleaners and drainers. | 3. Tumbler-washers.       |
| Combined                       | 5. Wool-washing machines. |

# DIVISION XXVIII.

EXAMINER W. W. TOWNSEND.

CLASSES—123, Air and Gas Engines; 34, Driers; 98, Pneumatics; 62, Refrigeration; 170, Wind-Wheels.

## CLASS 123.—AIR AND GAS ENGINES. (XXVIII.)

### Sub-classes.

- |             |               |
|-------------|---------------|
| Engines—    | Engines—      |
| 1. Air,     | 3. Explosive, |
| 2. Caloric, | 4. Gas.       |

## CLASS 34.—DRIERS. (XXVIII.)

### Sub-classes.

- |                           |                         |
|---------------------------|-------------------------|
| 1. Absorbent.             | 25. Push-bar.           |
| 2. Baffles and screens.   | 26. Racks and stands.   |
| 3. Condensers.            | Reels—                  |
| Cylinder—                 | 27. Skein.              |
| 4. External,              | 28. Tray-carrier,       |
| Internal—                 | 29. Winding.            |
| 5. Rotary horizontal,     | 30. Retort.             |
| 6. Rotary inclined,       | 31. Rolls.              |
| 7. Stationary horizontal, | 32. Rotary disk.        |
| 8. Stationary inclined,   | Shafts—                 |
| 9. Vertical.              | 33. Inclined,           |
| 10. Disk and hopper.      | 34. Vertical,           |
| 11. Elevator.             | 35. Zigzag.             |
| 12. Endless carrier.      | 36. Shaft and cylinder. |
| 13. Endless scraper.      | 37. Shaft and shelf.    |
| Floors—                   | 38. Shaking.            |
| 14. Fixed,                | 39. Shelf and tray.     |
| 15. Tilting section.      | 40. Sliding rack.       |
| 16. Forms and platens.    | 41. Solar.              |
| 17. Frames and trays.     | 42. Spiral.             |
| 18. Heaters.              | 43. Stirrers.           |
| 19. Houses and kilns.     | 44. Trough and beater.  |
| 20. Lath and chain.       | 45. Trough and screw.   |
| 21. Pans.                 | Truck and rail—         |
| 22. Pan and boiler.       | 46. Horizontal,         |
| 23. Pan and scraper.      | 47. Inclined.           |
| 24. Processes.            | 48. Web.                |

## CLASS 98.—PNEUMATICS. (XXVIII.)

### Sub-classes.

- |                       |                         |
|-----------------------|-------------------------|
| 1. Aerial navigation. | Fans—                   |
| Air and gas pumps—    | 29. Toilet.             |
| 31. Hydraulic.        | 35. Pneumatic railways— |
| 32. Mechanical,       | 36. Dispatch-carriers.  |
| 33. Mercury,          | 37. Dispatch-tubes.     |
| 34. Rotary.           | 38. Motor-charging.     |
| 5. Bellows.           | 15. Sand-blowers.       |
| Chimneys and cowl—    | Ventilation—            |
| 22. Rotary,           | 7. Car,                 |
| 23. Stationary.       | 10. Grain,              |
| 28. Fan attachments.  | 11. House,              |
| Fans—                 | 12. Mine.               |
| 27. Automatic,        | 19. Window-ventilators. |

## CLASS 62.—REFRIGERATION. (XXVIII.)

### Sub-classes.

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Air-cooling apparatus— | 8. Implements.              |
| 15. Air-expansion.        | 16. Lard-coolers.           |
| 2. Beer-coolers.          | 10. Refrigerators.          |
| 3. Corpse-coolers.        | 11. Refrigerator-buildings. |
| 4. Ice-cream freezers—    | 12. Refrigerator-cars.      |
| 17. External freezing.    | 13. Water-coolers.          |
| 6. Ice-machines.          | 14. Wine-coolers.           |

## CLASS 170.—WIND-WHEELS. (XXVIII.)

### Sub-classes.

- |                          |                                |
|--------------------------|--------------------------------|
| 4. Automatic regulators. | Wind-wheels—                   |
| 5. Gearing.              | 7. Oscillating,                |
| Wind-wheels—             | 2. Vertical feathering-blades, |
| 1. Horizontal,           | 3. Vertical solid-wheel.       |



# DIVISION XXIX.

EXAMINER MORRIS.

CLASSES.—20, Carpentry; 147, Coopering; 108, Roofing; 157, Wheelwright-Machines; 143, Wood-Sawing; 142, Wood-Turning; 144, Woodworking-Machines; 145, Woodworking-Tools.

## CLASS 20.—CARPENTRY. (XXIX.)

### Sub-classes.

- |                             |                           |
|-----------------------------|---------------------------|
| 53. Ceiling center-pieces.  | 14. Shutters—             |
| 34. Compound lumber.        | 44. Sliding.              |
| 54. Corner-shields.         | 45. Swinging.             |
| 2. Doors—                   | 15. Skylights.            |
| 23. Car—                    | 33. Splices and joints.   |
| 51. Grain,                  | 17. Stairs.               |
| 24. Sliding.                | 18. Stair-covers.         |
| 56. Door and window frames. | 31. Thresholds.           |
| 32. Drip-troughs.           | 62. Voting-booths.        |
| 4. Floors.                  | 63. Weather-boarding.     |
| 5. Frame houses.            | Weather-strips—           |
| 9. Lathing.                 | 35. Hinged—               |
| 57. Mantels.                | 37. Sills.                |
| 10. Marquetry.              | 38. Packing.              |
| 39. Mats—                   | 36. Sliding.              |
| 67. Metallic,               | Window—                   |
| 43. Wire.                   | 46. Chairs.               |
| 26. Moldings.               | 40. Guards.               |
| 53. Panels and wainscoting. | 47. Sashes—               |
| 11. Portable houses.        | 48. Sliding.              |
| 12. Scaffolds—              | 50. Sliding and swinging. |
| 28. Bracket,                | 49. Swinging.             |
| 60. Trestle.                | 20. Windows—              |
| 19. Scaffold-binders.       | 64. Car.                  |
| 13. Shingling-brackets.     | 66. Wooden walls.         |

## CLASS 147.—COOPERING. (XXIX.)

### Sub-classes.

- |                            |                      |
|----------------------------|----------------------|
| 1. Barrel-head making.     | 12. Crozing barrels. |
| 2. Barrel-hoop machines.   | 6. Crozing staves.   |
| 3. Barrel-making machines. | 13. Hoop-drivers.    |
| 4. Basket-making machines. | 8. Jointing staves.  |
| 5. Box-machines.           | 10. Wooden articles. |
| 11. Coiling.               |                      |

## CLASS 108.—ROOFING. (XXIX.)

### Sub-classes.

- |                         |                       |
|-------------------------|-----------------------|
| 1. Battening.           | Metallic—             |
| 9. Car.                 | 15. Standing-seam.    |
| 12. Conductor-supports. | 10. Portable.         |
| 2. Eaves-troughs—       | 13. Ridges.           |
| 18. Strainers.          | 5. Roofs.             |
| 3. Fenders.             | 6. Slate and shingle. |
| 8. Flashings.           | 11. Thatch.           |
| 4. Metallic—            | 7. Tile.              |
| 14. Shingle,            | 16. Valleys.          |

## CLASS 157.—WHEELWRIGHT-MACHINES. (XXIX.)

### Sub-classes.

- |                          |                          |
|--------------------------|--------------------------|
| 1. Axle-gages.           | 8. Tire-setters.         |
| 2. Boring bubs.          | 9. Wheelwright-machines. |
| 3. Carriage-bow setters. |                          |

## CLASS 143.—WOOD-SAWING. (XXIX.)

### Sub-classes.

- |                         |                                |
|-------------------------|--------------------------------|
| 11. Log-turners.        | Sawing-machines—               |
| 15. Saw-bucks.          | 32. Reciprocating-saw—         |
| 25. Saw-guards.         | 21. Scroll.                    |
| 26. Saw-guides.         | 13. Resawing.                  |
| 16. Saw-hanging.        | 20. Shingle—                   |
| Sawing-machines—        | 33. Horizontal-saw.            |
| 1. Band-saw.            | 28. Tubular-saw.               |
| 4. Circular-saw—        | 17. Sawmill-appliances.        |
| 22. Angular.            | 34. Sawmill-carriages. Feed    |
| 6. Fire-wood,           | 35. Sawmill-carriages. Offset- |
| 23. Radial.             | ting                           |
| 24. Traveling.          | 18. Sawmill-dogs.              |
| 29. Drag. Craak—        | 9. Sawmill set-works.          |
| 30. Lever.              | 14. Saws.                      |
| 5. Edgers.              | 27. Saw-table gages.           |
| 3. Mills. Circular-saw— | 19. Saw-teeth.                 |
| 31. Auxiliary-saw,      |                                |
| 12. Reciprocating-saw,  |                                |

## CLASS 142.—WOOD-TURNING. (XXIX.)

### Sub-classes.

- |                        |                            |
|------------------------|----------------------------|
| 9. Irregular forms.    | 3. Lathe appliances.       |
| Lathes—                | 8. Oval forms.             |
| 12. Automatic-spindle, | 16. Polygonal forms.       |
| 2. Gage,               | Regular forms—             |
| 13. Many-spindle,      | 17. Lateral-movement,      |
| 14. Single-chuck,      | 18. Longitudinal-movement. |
| 15. Tubular-cutter.    |                            |

## CLASS 144.—WOODWORKING-MACHINES. (XXIX.)

### Sub-classes.

- |                               |                             |
|-------------------------------|-----------------------------|
| 1. Bending wood.              | Mortising—                  |
| 2. Boring—                    | 61. Rotary cutters.         |
| 77. Portable.                 | 19. Osier-peelers.          |
| 43. Boring and reaming.       | 22. Pencil-wood. Making     |
| 78. Box-nailing machines.     | Planers—                    |
| 6. Clothes-pin machines.      | 64. Beveling.               |
| 8. Comb-teeth. Cutting        | 65. Rotary-cylinder,        |
| 80. Cutters—                  | 66. Rotary-disk,            |
| 49. Chain,                    | 25. Sliding.                |
| 9. Rotary-stock.              | 23. Planer attachments.     |
| 10. Cutting dye-wood.         | 27. Planing and matching.   |
| 11. Cutting gears.            | 28. Planing and sawing.     |
| 14. Dovetailing.              | 63. Presser bars and rolls. |
| 81. Feed mechanism—           | 67. Punching-cutters.       |
| 82. Rolls.                    | 29. Rossing bark.           |
| 50. Gaining.                  | 68. Routing—                |
| 51. Machine-tables.           | 4. Pattern.                 |
| 16. Match-splints. Making     | Sashes and blinds—          |
| 75. Match-trays.              | 31. Making,                 |
| Mitering—                     | 74. Tenoning.               |
| 83. Knife,                    | 69. Shaving. Fixed-knife    |
| 84. Saw.                      | Slicers—                    |
| Molding—                      | 70. Beveling.               |
| 85. Axles,                    | 71. Reciprocating.          |
| 52. Clamped-work,             | 72. Rotary and oscillating. |
| 53. Hand-feed.                | 36. Slivering.              |
| 54. Lateral-feed.             | 37. Special work.           |
| 55. Pattern-feed.             | 38. Splitting and bundling. |
| 86. Revolving-feed.           | 73. Tenoning and boring.    |
| 56. Special-feed.             | 40. Universal joiners.      |
| 57. Straight-feed.            | 46. Wiring blinds.          |
| Mortising—                    | 42. Wooden pins. Making     |
| 58. Anger-cutters,            | 43. Wooden trays. Making    |
| 59. Chisel and auger cutters, | 44. Wood ornamentation.     |
| 60. Chisel-cutters,           | 45. Working rattan.         |

## CLASS 145.—WOODWORKING-TOOLS. (XXIX.)

### Sub-classes.

- |                         |                            |
|-------------------------|----------------------------|
| 1. Augers—              | 30. Floor-sets.            |
| 25. Countersink,        | 11. Gages—                 |
| 35. Detachable-lip.     | 45. Scratch.               |
| 36. Expandible.         | 31. Weather-board—         |
| 34. Gage attachments.   | 46. Marking.               |
| 2. Auger-handles—       | 12. Hammers and hatchets.  |
| 26. Ratchet.            | 23. Handsaws.              |
| 3. Bench-dogs.          | 47. Handsaw attachments.   |
| 4. Bench-planes—        | 13. Hollow augers.         |
| 37. Bit-adjusting.      | 52. Mallets.               |
| 38. Crozes.             | 53. Nail-extractors, Claw— |
| 29. Gage attachments.   | 54. Nipper.                |
| 51. Bit-sockets.        | 16. Saw-handles.           |
| 5. Bit-stocks—          | 17. Screw-drivers—         |
| 27. Ratchet.            | 48. Attachments,           |
| 6. Box-openers.         | 28. Ratchet.               |
| 7. Box-scrappers.       | 33. Spiral tool-drivers.   |
| 22. Cant-dogs.          | 18. Spokeshaves—           |
| 10. Chalk-line holders. | 49. Adjustable-bit.        |
| 8. Chisels—             | 55. Tenoning-bits.         |
| 39. Gage.               | 19. Tools.                 |
| 9. Clamps—              | 20. Tool-handles—          |
| 40. Box and miter,      | 32. Fastenings,            |
| 41. Double-screw,       | 50. Sockets.               |
| 42. Pivoted-jaw,        | 21. Work-benches.          |
| 43. Single-screw,       |                            |
| 44. Sliding-jaw.        |                            |

# DIVISION XXX.

EXAMINER WOODWARD.

CLASSES.—67, Lamps and Gas-Fittings; 199, Linotyping; 198, Matrix-Making; 88, Optics; 197, Type-Writing Machines.

## CLASS 67.—LAMPS AND GAS-FITTINGS. (XXX.)

### Sub-classes.

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1. Caudlesticks—                  | Lamps—                          |
| 97. Miners'.                      | Safety-tube and central-        |
| 66. Canopy shades and reflectors. | draft—                          |
| 3. Chandeliers. Gas               | 105. Miscellaneous,             |
| 4. Chimney-holders.               | 106. No-raiser,                 |
| 92. Chimneys, Composite—          | 107. Rack-bar,                  |
| 93. Double,                       | 108. Screw-rod,                 |
| 91. Integral.                     | 109. Swiss-screw,               |
| 99. Collars and tops.             | 85. Special,                    |
| 53. Cut-offs, Automatic—          | 29. Street.                     |
| 54. Pressure.                     | 24. Lanterns—                   |
| 89. Distributors.                 | 90. Dark,                       |
| 100. Drip-catchers.               | 35. Signal,                     |
| Drop-lights—                      | 46. Submarine,                  |
| 55. Burner attachments,           | 44. Tabular.                    |
| 56. Counterweight,                | 45. Lantern-holders.            |
| 57. Friction and clutch,          | 71. Lighting implements.        |
| 58. Spring-drum.                  | 84. Lighting eystems.           |
| Extinguishers—                    | Lights—                         |
| 60. Fluid,                        | 96. Christmas-tree,             |
| 59. Mechanical,                   | 50. Decorative,                 |
| 61. Pneumatic.                    | 70. Head,                       |
| 101. Founts.                      | 75. Hydrogen-platinum,          |
| 74. Gas brackets and valves.      | 34. Signal.                     |
| 7. Gas-burners—                   | Match-hoxes—                    |
| 51. Incandescent,                 | 98. Igniting,                   |
| 52. Regenerative,                 | 110. Single-delivery.           |
| 9. Regulating,                    | 27. Match-safes.                |
| 8. Gas-fittings.                  | 95. Oil indicators and fillers. |
| 62. Gas-lighting attachments.     | 80. Pedestals.                  |
| 77. Globes—                       | 81. Pocket-lighters.            |
| 102. Attachments.                 | 21. Posts.                      |
| 94. Guards.                       | Reflectors—                     |
| 78. Harps and hangers.            | 82. Hooded,                     |
| 79. Lamp attachments.             | 72. Miscellaneous,              |
| 83. Lamp-boxes.                   | 68. Side.                       |
| 33. Lamp-burners—                 | 37. Refracting attachments.     |
| 10. Argand,                       | 69. Safety lamps and lanterns.  |
| 11. Multiple-wick.                | Shade-supports—                 |
| 63. Lamp-lighting attach-         | 111. Double-clamp,              |
| ments.                            | 112. Drop,                      |
| 32. Lamps—                        | 113. Miscellaneous,             |
| 87. Bicycle,                      | 114. Spider,                    |
| 39. Bracket,                      | 115. Umbrella.                  |
| 76. Carriage,                     | 116. Spark-catchers.            |
| 42. Cigar-lighting,               | 73. Street-light hangers.       |
| 103. Flash,                       | 38. Torches.                    |
| 16. Forced-draft,                 | 30. Vapor-burners.              |
| 17. Independent-reservoir,        | 117. Vents.                     |
| 64. No-chimney,                   | 86. Wick-pickers.               |
| Safety-tube and central-          | 88. Wick raisers. Flat-         |
| draft—                            | 23. Wicks.                      |
| 104. Draw-bar,                    |                                 |

## CLASS 198.—MATRIX-MAKING. (XXX.)

### Sub-classes.

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Bar.                       | 5. Reciprocating die-carrier, |
| 2. Dies.                      | mechanical.                   |
| 3. Miscellaneous.             | 6. Rotary die-carrier.        |
| 4. Reciprocating die-carrier, |                               |
| electrical.                   |                               |

## CLASS 88.—OPTICS. (XXX.)

### Sub-classes.

- |                          |                            |
|--------------------------|----------------------------|
| 1. Altitude-instruments. | 9. Photometers.            |
| 19. Compasses.           | 10. Prisms.                |
| 2. Distance-instruments. | 11. Sextants.              |
| 23. Eyeglasses.          | 12. Spectacles.            |
| 3. Heliostats.           | 22. Spectacle-cases.       |
| 4. Kaleidoscopes.        | 13. Stakes and targets.    |
| 5. Lenses.               | 14. Stereoscopes.          |
| 6. Leveling-instruments. | 17. Surveying-instruments. |
| 7. Magic lanterns.       | 15. Telescopes.            |
| 8. Microscopes.          | 21. Testing-instruments.   |
| 24. Opera-glasses.       | 16. Tripods.               |
| 20. Optometers.          |                            |

## CLASS 199.—LINOTYPING. (XXX.)

### Sub-classes.

- |                          |                               |
|--------------------------|-------------------------------|
| 5. Bar-machines, Plural— | 3. Linotype-making.           |
| 6. Single.               | 2. Linotypes.                 |
| 7. Circulation-machines. | 9. Machine attachments.       |
| 8. Guide-machines.       | 10. Miscellaneous machines.   |
| 4. Justifying devices.   | 11. Rotary linotype-machines. |

## CLASS 197.—TYPE-WRITING MACHINES. (XXX.)

### Sub-classes.

- |                 |                       |
|-----------------|-----------------------|
| 1. Aligners.    | 8. Keyboards.         |
| 2. Attachments. | 9. Key-wheel—         |
| 3. Bar.         | 10. Miscellaneous.    |
| 4. Carriages.   | 11. Plate.            |
| 5. Cleaners.    | 12. Ribbon mechanism. |
| 6. Electrical.  | 13. Stenographic.     |
| 7. Index-wheel. |                       |

# DIVISION XXXI.

## EXAMINER ELY.

CLASSES.—195, Alcohol; 203, Ammonia, Water, and Wood-Distillation; 202, Charcoal and Coke; 35, Educational Appliances; 50, Fluid-Pressure Regulators; 48, Gas; 149, Hides, Skins, and Leather; 196, Mineral Oils; 87, Oils, Fats, and Glue; 91, Painting.

### CLASS 195.—ALCOHOL. (XXXI.)

#### Sub-classes.

- |                           |                            |
|---------------------------|----------------------------|
| 1. Beer—                  | Malting—                   |
| 4. Preserving—            | 21. Apparatus—             |
| 5. Pasteurizing,          | 22. Cylinders, rotary,     |
| 2. Purifying—             | 23. Malt-stirrers,         |
| 3. Finings and shavings.  | 24. Processes.             |
| 6. Distilled spirits—     | Mashing—                   |
| Aging—                    | 25. Apparatus—             |
| 7. Apparatus—             | 26. Digesters and disinte- |
| 9. Rocking racks,         | grators,                   |
| 10. Processes,            | 27. Fore-mashers,          |
| 11. Apparatus—            | 28. Mash-tubs—             |
| 12. Stills—               | 29. Rakes,                 |
| 13. Columns,              | 30. Tubular rakes,         |
| 14. Doublers and worms,   | 31. Hops,                  |
| 16. Vapor-filters,        | 32. Processes,             |
| 15. Rectifying processes. | 33. Wort—                  |
| Fermenting—               | 34. Hopping,               |
| 17. Apparatus—            | 35. Purifying.             |
| 18. Vats,                 | 36. Wines.                 |
| 19. Vent-hungs,           |                            |
| 20. Processes.            |                            |

### CLASS 203.—AMMONIA, WATER, AND WOOD-DISTILLA- TION. (XXXI.)

#### Sub-classes.

- |                |           |
|----------------|-----------|
| 1. Ammonia.    | 5. Water. |
| 2. Turpentine— | 6. Wood.  |
| 3. Apparatus,  |           |
| 4. Processes.  |           |

### CLASS 202.—CHARCOAL AND COKE. (XXXI.)

#### Sub-classes.

- |                           |                     |
|---------------------------|---------------------|
| 1. Charcoal—              | Coke—               |
| 10. Kilns,                | Ovens—              |
| 2. Processes,             | 6. Doors,           |
| 3. Retorts.               | 7. Dumping-bottoms. |
| Coke—                     | 8. Processes.       |
| 4. Ovens—                 | 9. Retort-ovens.    |
| 5. Chargers and discharg- |                     |
| ers,                      |                     |

### CLASS 35.—EDUCATIONAL APPLIANCES. (XXXI.)

#### Sub-classes.

- |                     |                     |
|---------------------|---------------------|
| 1. Alphabet-blocks. | 6. Maps.            |
| 2. Arithmetic.      | 12. Miscellaneous.  |
| 3. Astronomy.       | 8. Penmanship.      |
| 15. Blackboards.    | 9. Reading.         |
| 13. Cryptography.   | 10. Slates.         |
| 5. Globes.          | 14. Slate-mufflers. |

### CLASS 50.—FLUID-PRESSURE REGULATORS. (XXXI.)

#### Sub-classes.

- |               |            |
|---------------|------------|
| 4. Cut-offs.  | 7. Float—  |
| 5. Diaphragm— | 8. Lever.  |
| 6. Lever.     | 9. Piston. |

### CLASS 48.—GAS. (XXXI.)

#### Sub-classes.

- |                             |                            |
|-----------------------------|----------------------------|
| 2. Carburetors—             | Gas—                       |
| 24. Carbureting-lamps,      | 30. Producers,             |
| 29. Float-vaporizers,       | 19. Water,                 |
| 25. Gas and air mixers,     | 20. Wood.                  |
| 3. Jet-mixers,              | 11. Holders.               |
| 26. Oil-feed, float-valves, | Purifiers—                 |
| 27. Oil-feed, rotary,       | 31. Boxes,                 |
| 28. Revolving,              | 32. Compounds,             |
| 4. Center-seals and by-pass | 33. Condensers,            |
| valves.                     | 34. Miscellaneous,         |
| 9. Dip-pipes.               | 35. Processes,             |
| 22. Distribution—           | 36. Revivifying,           |
| 46. Leakage.                | 37. Trays,                 |
| 47. Preventing leakage.     | 38. Washers and scrubbers— |
| 48. Regulating pressure.    | Float,                     |
| 49. Separators.             | 40. Reciprocating,         |
| 10. Exhausters.             | 41. Rotary.                |
| Gas—                        | 18. Retort-chargers.       |
| 5. Coal,                    | 23. Retort gas-furnaces.   |
| 6. Coal and oil,            | 16. Retort-lids.           |
| 8. Coal and water,          | 17. Retorts and settings—  |
| 7. Coal, oil, and water,    | Attachments,               |
| 12. Hydrogen,               | 43. Cleaning,              |
| 13. Oil,                    | 44. Domestic plants,       |
| 14. Oil and water—          | 45. Retorts.               |
| 50. Generators—Cupola,      |                            |
| 51. Refractory,             |                            |
| 52. Retort,                 |                            |

### CLASS 149.—HIDES, SKINS, AND LEATHER. (XXXI.)

#### Sub-classes.

- |                              |                             |
|------------------------------|-----------------------------|
| 8. Apparatus—                | Apparatus—                  |
| 22. Coloring and polishing,  | 13. Tanners' tools,         |
| 19. Endless belts,           | 9. Tanning,                 |
| 16. Helical tools,           | 11. Tumbling-drums,         |
| 20. Putting out and stretch- | 10. Vats.                   |
| ing—                         | Processes and compositions— |
| 21. Stretching-frames,       | 3. Bating,                  |
| 17. Reciprocating tools—     | 7. Coloring and polishing,  |
| 18. Rocking frames,          | 6. Currying,                |
| 23. Rolling and embossing,   | 2. Depilating,              |
| 14. Rotary cylinders,        | 1. Preserving,              |
| 15. Rotating tools,          | 5. Tanning,                 |
| 12. Tables and frames,       | 5. Tawing.                  |

# DIVISION XXXI.—CONTINUED.

## CLASS 196.—MINERAL OILS. (XXXI.)

### Sub-classes.

1. Apparatus—	Apparatus—
2. Reducing gravity,	2. Stills—
3. Stills—	16. Vacuum,
6. Bottoms,	17. Vapor-outlets.
5. Condensers,	Coal-oil—
7. Feeders,	21. Processes,
8. Films,	19. Retorts—
9. Furnaces and flues,	20. Rotary.
10. Heads,	22. Compositions—
11. Jackets,	23. Burning-fluid.
12. Rotary,	24. Paraffine.
13. Series,	25. Processes—
4. Stirrers and scrapers,	26. Chemical,
18. Supplementary heating,	27. Injecting gases,
14. Tubular,	28. Residuum,
15. Utilizing gases and residue,	29. Washing and filtering.

## CLASS 87.—OILS, FATS, AND GLUE. (XXXI.)

### Sub-classes.

17. Adhesives.	12. Refining fat oils.
18. Artificial butter.	13. Rendering.
21. Candles.	23. Soap articles.
3. Candle apparatus.	15. Soap-cutting.
4. Decomposing fats.	24. Soap-frames.
5. Detergents.	16. Soap-manufacture.
6. Extracting oils.	25. Soap-presses.
7. Glue.	26. Suint.
9. Lubricants.	19. Wax.

## CLASS 91.—PAINTING. (XXXI.)

### Sub-classes.

Apparatus—	Compositions—
23. Air-brushes,	60. Mixed paints—
Brushes or rolls—	40. Alkali,
24. Fixed,	41. Barrel-linings,
25. Reciprocating,	42. Oil,
26. Dipping-tanks,	61. Rubber,
27. Enameling wood,	43. Tar,
28. Fountain-discharge,	62. Vulcanized,
29. Heaters,	44. Water—
30. Indenting and filling machines,	45. Soluble silicates,
31. Paint-mixers,	46. Pigments—
32. Pots and tools,	47. Lamp-black,
Rolls or webs—	48. Lead salts,
33. Continuous-motion,	49. Ultramarine,
hand,	50. Zinc salts,
34. Interrupted-motion,	Stove-polishes,
hand,	Varnishes—
35. Work-holders.	52. Alkali,
Compositions—	Making—
58. Driers,	51. Processes and apparatus,
59. Fillers,	53. Oil,
36. Fireproofing compounds,	54. Pyroxyline,
Inks—	55. Tar.
37. Copying and sensitive,	Processes—
38. Printing,	56. Processes,
39. Writing,	57. Japanning.

# DIVISION XXXII.

ACTING EXAMINER WITHERSPOON.

CLASSES.—180, Accouterments; 40, Advertising; 190, Baggage; 209, Carbonating Beverages; 210, Packaging and Dispensing Liquids; 150, Packing and Storing Vessels.

## CLASS 180.—ACCOUTERMENTS. (XXXII.)

### Sub-classes.

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Accouterments.             | 23. Scabbards—                |
| 16. Cartridge-belts.          | 24. Hangers.                  |
| 17. Cartridge-boxes—          | 8. Tents—                     |
| 18. Cartridge-feed.           | 25. Bed,                      |
| 19. Game-belts.               | 26. Frames,                   |
| 20. Gun and pistol holders.   | 27. Pegs and poles,           |
| 15. Knapsacks and haversacks. | 28. Shelter,                  |
| 21. Knapsack-slings.          | 29. Pipe-shields and ventila- |
| 22. Safety-harness.           | tors.                         |

## CLASS 40.—ADVERTISING. (XXXII.)

### Sub-classes.

- |                         |                              |
|-------------------------|------------------------------|
| 1. Articles—            | 84. Sign dummies.            |
| 78. Multiple-card,      | 6. Sign-letters.             |
| 77. Single-card.        | 4. Signs—                    |
| 75. Card-exhibitors—    | 7. Automatic figure,         |
| 76. Droppers,           | 58. Belt,                    |
| 20. Rotary,             | 59. Endless-belt—            |
| 21. Sliding.            | 89. Motors—Clock,            |
| 3. Card-racks.          | 90. Vehicle,                 |
| 22. Change-receivers.   | 60. Guide-post,              |
| 25. Display-box covers. | 65. Hanging,                 |
| 26. Display-boxes—      | 61. Illuminated—             |
| 27. Sample-holders.     | 91. Lantern,                 |
| 28. Display-cards.      | 92. Perforated,              |
| 40. Display-trays.      | 62. Interchangeable-letter,  |
| 41. Drawer-plates.      | 63. Interchangeable-slide,   |
| 43. Embroidery-cases.   | 64. Mechanically-rotated,    |
| 9. Labels.              | 86. Multiple-plate,          |
| 10. Label-holders.      | 87. Raised letters,          |
| 79. Clip,               | 65. Rotatable,               |
| 80. Freight-car,        | 88. Single-plate,            |
| 81. Hat,                | 66. Street-lamp,             |
| 82. Slide,              | 67. Vibrating,               |
| 83. Street-car.         | 73. Vending devices. Ribbon- |
| 52. Pattern-exhibitors. | holders.                     |

## CLASS 190.—BAGGAGE. (XXXII.)

### Sub-classes.

- |                         |                                 |
|-------------------------|---------------------------------|
| 8. Book-clamps.         | 5. Trunks—                      |
| 1. Camp and lunch kits. | 6. Convertible—                 |
| 2. Canteens and flasks. | 24. Bed,                        |
| 3. Hat and fur cases.   | 25. Bureau,                     |
| 4. Musicians' cases.    | 26. Desk and table,             |
| 9. Package-carriers.    | 27. Wardrobe,                   |
| 10. Package-hauls.      | 28. Corner-shields,             |
| 11. Saddle-bags.        | 29. Cylindrical,                |
| 12. Shawl-straps.       | 30. Extensible,                 |
| 13. Toilet-kits.        | 31. Followers,                  |
| 7. Traveling-bags—      | 32. Handles,                    |
| 14. Convertible,        | 33. Hinge-stays,                |
| 15. Fasteners—          | 34. Lid-stays,                  |
| 16. Pivoted,            | 35. Straps and strap-fasteners, |
| 17. Frameless,          | 36. Supporting devices,         |
| 18. Frames—             | 37. Trays,                      |
| 19. Top-opening,        | 38. Tray lifters and support-   |
| 20. Handles,            | ers,                            |
| 21. Handle-fasteners,   | 39. Wall.                       |
| 22. Hinge-stays,        |                                 |
| 23. Telescoping.        |                                 |

## CLASS 209.—CARBONATING BEVERAGES. (XXXII.)

### Sub-classes.

- |                            |                      |
|----------------------------|----------------------|
| 7. Beverages.              | 15. Gas-collection.  |
| 1. Carbonators—            | 16. Gas-distributio. |
| 10. Beer—                  | 4. Gas Generators—   |
| 11. Atomizer,              | 6. Acid-feed siphon, |
| 12. Pressure,              | 17. Furnace,         |
| 13. Pump,                  | 5. Rotary-stirrer.   |
| 3. Rotary-mixer,           |                      |
| 14. Spray.                 |                      |
| 8. Carbonators and genera- |                      |
| tors—                      |                      |
| 9. Portable.               |                      |

## CLASS 210.—PACKAGING AND DISPENSING LIQUIDS. (XXXII.)

### Sub-classes.

- |                           |                           |
|---------------------------|---------------------------|
| 1. Beer-dispensing—       | Filling-machines—         |
| 2. Barrel-taps,           | 24. Gage—                 |
| 3. Faucets—               | 25. Syrup,                |
| 4. Foam,                  | 26. Reciprocating-head,   |
| 5. Pump,                  | 27. Siphon-tube.          |
| 6. Foam-separators,       | 28. Filling and corking—  |
| 7. Pipe-cleaners,         | 35. Reciprocating-head,   |
| 8. Pressure—              | 29. Internal-stopper,     |
| 9. Gas,                   | 30. Turn-over.            |
| 10. Pump.                 | 36. Oil-dispensing tanks— |
| 11. Capping-machines.     | 42. Cabinet,              |
| 12. Corking-machines—     | 37. Drainers—             |
| 13. Hand-tools.           | 43. Pump—                 |
| 14. Magazine-feed.        | 44. Inclosed,             |
| 15. Dispensing-fountains— | 38. Followers,            |
| 16. Cans—Horizontal,      | 45. Nozzles, Pivoted—     |
| 17. Vertical.             | 46. Section,              |
| 18. Draft apparatus—      | 47. Vent,                 |
| 20. Pressure-reducers,    | 39. Pressure—             |
| 31. Liquid-holders,       | 48. Blow,                 |
| 19. Portable—             | 49. Bulb,                 |
| 32. Bottle-taps,          | 50. Pistoo,               |
| 33. Siphons,              | 41. Pump,                 |
| 34. Pump.                 | 42. Siphon.               |
| 21. Filling-machines—     |                           |
| 22. Cut-offs, Automatic—  |                           |
| 23. Float,                |                           |

## CLASS 150.—PACKING AND STORING VESSELS. (XXXII.)

### Sub-classes.

- |                             |                               |
|-----------------------------|-------------------------------|
| 178. Ballot-boxes—          | Letter-boxes—                 |
| 225. Ball,                  | 244. Parcel.                  |
| 226. Canceling.             | 183. House—                   |
| 227. Closures.              | 245. Closures—                |
| 179. Fare-boxes—            | 254. Bottom,                  |
| 180. Change,                | 246. Pivoted-body,            |
| 228. Check-receivers,       | 247. Sliding,                 |
| 230. Closed-slot,           | 248. Collection and delivery. |
| 229. Conveyers,             | 249. Door-jamb lock,          |
| 231. Detachable locking-re- | 250. Name-plate,              |
| ceptacle,                   | 251. Package—                 |
| 181. Portable—              | 252. Locking,                 |
| 232. Closures,              | 253. Signal.                  |
| 233. Shelf, Rotating—       |                               |
| 236. Serrated,              |                               |
| 237. Sliding,               |                               |
| 234. Tilting—               |                               |
| 235. Multiple.              |                               |
| 182. Letter-boxes—          |                               |
| 238. Chutes, Discharge—     |                               |
| 239. Double-trap,           |                               |
| 240. Receiving—             |                               |
| 241. Rotary,                |                               |
| 242. Detachable-receptacle, |                               |
| 243. Indicators,            |                               |
- 
- |                             |
|-----------------------------|
| Cloth, leather, and rubber— |
| 191. Bag-closures—          |
| 192. Bar.                   |
| 134. Bag-fasteners—         |
| 193. Cord,                  |
| 194. Cleat,                 |
| 195. Clamp,                 |
| 197. Hinged-jaw,            |
| 198. Locking-lever,         |
| 199. Strap,                 |
| 196. Tie.                   |

# DIVISION XXXII.—CONTINUED.

## CLASS 150.—PACKING AND STORING VESSELS. (XXXII.)

Continued.

### Sub-classes.

#### *Cloth, leather, and rubber—*

- 128. Bags.
- 129. Baskets and buckets.
- 130. Boxes.
- 170. Mail-bags—
- 200. Closures—
- 201. Angular-frame,
- 202. Flap—
- 203. Corner folds,
- 204. Sliding fastener,
- 205. Turning fastener,
- 206. Pivoted jaw,
- 207. Top-slide,
- 208. Label-holders—
- 209. Card-clamps.
- 187. Pocket-book fasteners and frames.
- 185. Pocket-book holders.
- 186. Pocket-books.
- 188. Portfolios—
- 189. Roll.
- 190. Purses.

#### *Glass and pottery—*

- 11. Bottles and jugs—
- 126. Neck-collars,
- 135. Brnsb and spreader.
- 43. Boxes and tanks.
- 18. Ejectors.
- 12. Jackets—
- 81. Stands,
- 74. Wrapper.
- 44. Jars—
- 73. Clamp,
- 96. Expanding-stopper,
- 75. Screw-cap,
- 97. Screw-stopper,
- 79. Swing-cover,
- 80. Swing-fastener.
- 15. Stopper-fasteners—
- 77. Cap and tie,
- 99. Screw-cap,
- 86. Swing,
- 87. Swing-stopper—
- 164. Aside,
- 165. Yoke,
- 166. Yoke and lever,
- 167. Yoke and top lever.
- 16. Stopper-locks.
- 107. Stopper-pullers.
- 17. Stoppers—
- 105. Cap,
- 145. Dose,
- 88. Expanding,
- 48. Internal,
- 147. Rotary,
- 53. Screw—
- 106. Cap,
- 146. Tube,
- 49. Valve—
- 124. Screw.

#### *Metallic vessels—*

- 47. Baskets and crates.
- 29. Boxes—
- 85. Blacking,
- 137. Compartment,
- 83. Knockdown,
- 84. Pocket.
- 51. Canisters.
- 30. Cans and unclassified vessels—
- 100. Single-blank.
- 54. Casks.
- 55. Closures—
- 56. Clamp,
- 57. Screw-cap,
- 98. Screw-stopper,
- 58. Seam or solder—
- 171. Rip,
- 108. Swing-cover.
- 52. Coal-scuttles.
- 110. Ears and bails.
- 221. Garbage-receptacles—
- 222. Buckets,
- 223. Pivoted.
- 111. Handles.
- 33. Hermetic sealing.
- 34. Jackets—
- 62. Cask,
- 63. Package,
- 123. Stand.
- 61. Jackets and stands. Swing-
- 64. Linings.
- 36. Milk-cans.

#### 37. Nozzles and vents—

- 114. Screw,
- 65. Screw-cap,
- 66. Valve—
- 115. Screw.
- Paint-tubes—
- 210. Collapsible.
- 116. Spouted—
- 117. Feeders—
- 118. Piston.
- 121. Storage.
- 122. Transport.

#### *Paper vessels: bags—*

- 142. Bags—
- 143. Closures,
- 144. Square-bottom.

#### *Paper vessels: barrels and pails—*

- 82. Barrels.
- 148. Pails.

#### *Paper vessels: Boxes. Angular—*

- 149. Boxes. Angular—
- 150. Blanks. Plural,
- 151. Compartment—
- 152. Folded,
- 153. End folds,
- 154. Side and end folds,
- 155. Side folds,
- 156. Side folds and end laps,
- 157. End laps,
- 158. Side and end laps,
- 159. Side laps,
- 160. Slide,
- 161. Stays.

#### *Paper vessels: Boxes. Curved—*

- 162. Boxes. Curved—
- 163. Compartment.

#### *Wooden vessels: barrels, buckets, and pails—*

- 132. Barrels—
- 1. Bent,
- 101. Bungs,
- 4. Bungs and vents—
- 102. Expanding,
- 103. Plug,
- 5. Bung-wrenches,
- 133. Closures—
- 127. Screw and bayonet,
- 172. Compartment,
- 6. Covers,
- 213. Heads,
- 7. Hoops,
- 211. Knockdown,
- 8. Linings and coverings,
- 10. Stands,
- 212. Ventilating.

#### *Wooden vessels: baskets—*

- 41. Baskets—
- 91. Covered,
- 67. Folding.

#### *Wooden vessels: boxes—*

- 19. Boxes—
- 169. Bent—
- 92. Closures,
- 93. Single-blank,
- 95. Block,
- 20. Can and bottle cases—
- 215. Vial-cases,
- 21. Cell-cases—
- 68. Cloth or cord,
- 69. Paper—
- 141. Boxes.
- 70. Wood—
- 71. Voucher.
- 92. Closures,
- 140. Compartment,
- 22. Crates—
- 216. Fruit-boxes,
- 217. Hat,
- 218. Package,
- 219. Poultry,
- 23. Crates and boxes, Folding—
- 220. Poultry—
- 109. Knockdown,
- 104. Linings and coverings,
- 27. Powders, Cases for
- 113. Stays, Corner-
- 112. Straps,
- 124. Toilet and silverware.

# DIVISION XXXIII.

EXAMINER SEELY.

## TRADE-MARKS.

This classification has no official character, but is a grouping of merchandise kindred in character to facilitate search by the Office. The parenthetical references point to the titles of analogous groups into which the field of search may extend, depending on the nature of the merchandise.

### TRADE-MARKS.

#### *Titles.*

1. Agricultural implements. (See Title 41, 73.)
2. Baking-powder and yeast. (See Title 20.)
3. Beverages. (See Title 42.)
4. Blacking and leather-dressing. (See Title 12.)
5. Boots, shoes, and lasts. (See Title 57.)
6. Brooms and brushes.
7. Buttons. (See Title 22.)
8. Canned goods. (See Title 16, 26.)
9. Carpets, &c.
10. Cement, plaster, and bricks.
11. Cigars and cigarettes. (See Title 71.)
12. Cleaning and polishing preparations. (See Title 4.)
13. Coffee and tea.
14. Confectionery.
15. Corsets. (See Title 75.)
16. Cured meats. (See Title 8, 26, 37.)
17. Cutlery and edge-tools. (See Title 73, 68.)
18. Dairy products.
19. Dentistry.
20. Drugs and chemicals. (See Title 44, 53, 72.)
21. Dry goods. (See Title 22, 69.)
22. Fancy goods. (See Title 7, 21, 30, 47.)
23. Fertilizers. (See Title 20.)
24. Firearms, ammunition, and explosives.
25. Flour.
26. Food and relishes. (See Title 8, 16, 62.)
27. Fuel.
28. Games and toys. (See Title 46.)
29. Glassware. (See Title 32, 55.)
30. Gloves. (See Title 22.)
31. Head-wear.
32. Household articles. (See Title 29, 35, 55.)
33. Inks. (See Title 65.)
34. Iron, steel, and manufactures. (See Title 41, 73.)
35. Jewelry and plated ware. (See Title 32, 70.)
36. Lamps, lanterns, &c. (See Title 29.)
37. Lard and tallow. (See Title 16, 18.)
38. Laundry articles. (See Title 32, 61, 64.)
39. Leather and saddlery.
40. Locks and hardware. (See Title 72, 73.)
41. Machines. (See Title 1, 34, 73.)
42. Malt liquors. (See Title 3, 63.)
43. Matches.
44. Medical compounds. (See Title 20, 53, 72.)
45. Miscellaneous.
46. Musical instruments. (See Title 29.)
47. Needles and pins. (See Title 22.)
48. Oils and lubricants. (See Title 51.)
49. Optics and measuring-instruments. (See Title 73.)
50. Packing. (Machinery.) (See Title 39, 57.)
51. Paints and painters' supplies. (See Title 48.)
52. Paper and envelopes. (See Title 65.)
53. Poisons for animals. (See Title 20, 44.)
54. Publications.
55. Receptacles. (See Title 29, 32.)
56. Rope, cord, and twine. (See Title 59.)
57. Rubber goods. (See Title 5, 50, 69.)
58. Sewing-machines and attachments. (See Title 41, 73.)
59. Sewing silk, cotton, and thread. (See Title 56.)
60. Shirts, collars, and cuffs. (See Title 75.)
61. Soap. (See Title 38, 72.)
62. Spices, mustard, and salt. (See Title 26.)
63. Spirituous liquors. (See Title 42, 77.)
64. Starch, corn-starch, and products. (See Title 26, 38.)
65. Stationery miscellany. (See Title 33, 52.)
66. Stoves and heaters.
67. Sugar, sirup, and molasses.
68. Surgical instruments and appliances. (See Title 17.)
69. Tailoring and clothing. (See Title 21, 57, 75.)
70. Time-keeping instruments. (See Title 35.)
71. Tobacco and snuff. (See Title 11.)
72. Toilet articles and preparations. (See Title 20, 61.)
73. Tools and devices.
74. Umbrellas, parasols, and canes.
75. Underwear and furnishing. (See Title 15, 60.)
76. Vehicles.
77. Wines. (See Title 3, 42, 63.)

### PRINTS AND LABELS.

Not classified, but arranged in chronological order and preserved for reference in the Examiner's room.

# DIVISION XXXIV.

EXAMINER SIMPSON.

CLASSES.—188, Railway-Brakes; 213, Railway Draft Appliances; 105, Railway Rolling-Stock.

## CLASS 188.—RAILWAY-BRAKES. (XXXIV.)

### Sub-classes.

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>16. Automatic—</li> <li>17. Draw-bar actuated—</li> <li>18. Centrifugal governor,</li> <li>19. Winding.</li> <li>20. Push-rod actuated—</li> <li>21. Winding.</li> <li>22. Beams.</li> <li>23. Brake-flange on wheel.</li> <li>24. Brakes.</li> <li>25. Brake-shoes—</li> <li>26. Chills,</li> <li>27. Composite faces,</li> <li>28. Fasteners,</li> <li>29. Non-metallic,</li> <li>30. Rail,</li> <li>31. Recessed faces.</li> <li>32. Conduit-slot.</li> <li>Disk on axle—</li> <li>33. Brake-band,</li> <li>34. Peripheral shoes,</li> <li>35. Side shoes.</li> <li>36. Electric—</li> <li>37. Magnetic clutch—</li> <li>38. Winding-drum,</li> <li>39. Magnetic shoes,</li> <li>40. Solenoid-operated.</li> <li>Fluid pressure—</li> <li>1. Automatic.</li> <li>9. Brake-piston indicators,</li> <li>10. Brake-release valves,</li> <li>2. Derailment,</li> <li>3. Direct,</li> <li>4. Electric,</li> <li>7. Engineers' valves,</li> <li>11. Load-regulated valves,</li> <li>5. Momentum-pump,</li> <li>12. Pressure-retainers,</li> </ul> | <ul style="list-style-type: none"> <li>Fluid-pressure—</li> <li>13. Train-pipe couplings,</li> <li>14. Train-pipe-release valves,</li> <li>8. Train-pipe stop-cocks,</li> <li>15. Triple valves,</li> <li>6. Vacuum.</li> <li>40. Hand-levers—</li> <li>41. Ratchet-drum,</li> <li>42. Ratchet-segment,</li> <li>43. Load regulated.</li> <li>Locomotive—</li> <li>44. Connected series,</li> <li>45. Shoes between drivers.</li> <li>46. Positive lock.</li> <li>47. Rail—</li> <li>48. Grippers.</li> <li>49. Slack-adjusters—</li> <li>50. Ratchet-bar,</li> <li>51. Ratchet-driven screw.</li> <li>52. Staffs—</li> <li>53. Friction-clutch handles,</li> <li>54. Geared,</li> <li>55. Locking-ratchets,</li> <li>56. Ratchet-handles—</li> <li>57. Pivoted,</li> <li>58. Screw,</li> <li>59. Winding attachments.</li> <li>60. Top shoes.</li> <li>61. Train-operated—</li> <li>62. Rotary shafts,</li> <li>63. Winding.</li> <li>64. Wheel and rail—</li> <li>65. Chock-block.</li> <li>Winding—</li> <li>66. Pneumatic shift.</li> <li>67. Winding-axle.</li> <li>68. Winding-drum.</li> </ul> |
|---|---|

## CLASS 213.—RAILWAY DRAFT APPLIANCES. (XXXIV.)

### Sub-classes.

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>39. Buffers—</li> <li>2. Fluid-pressure.</li> <li>Bumpers—</li> <li>3. Rigid.</li> <li>Couplings—</li> <li>35. Arrowhead and jaws,</li> <li>36. Bails,</li> <li>37. Beveled link and fixed catch,</li> <li>38. Beveled link and swing catch,</li> <li>40. Combined air-brake,</li> <li>Combined draw-bar and hook—</li> <li>4. With link,</li> <li>43. Headed link and V-slot,</li> <li>44. Hook and catch,</li> <li>45. Hook and link—</li> <li>5. Combined,</li> <li>Janney type—</li> <li>6. Emergency-releases,</li> <li>7. Gravity-locks,</li> <li>8. Horizontal sliding latches,</li> <li>9. Knuckle-openers,</li> <li>Knuckle-openers and locks—</li> <li>10. Combined,</li> <li>11. Pivoted horizontal latches,</li> </ul> | <ul style="list-style-type: none"> <li>Couplings—</li> <li>12. Pivoted vertical latches</li> <li>13. Safety-brackets,</li> <li>14. Vertical sliding pins,</li> <li>Link—</li> <li>15. Star-wheel detent,</li> <li>47. Link-lifters,</li> <li>49. Miller hook,</li> <li>50. Pins and links,</li> <li>Pin-supports—</li> <li>16. Balls,</li> <li>51. Gravity,</li> <li>52. Spring,</li> <li>54. Rolling detent,</li> <li>53. Rotary heads,</li> <li>55. Sliding detent,</li> <li>56. Swing-pins,</li> <li>57. Tools,</li> <li>58. Train,</li> <li>17. Twin jaws,</li> <li>59. Uncoupling-levers.</li> <li>1. Draft-cable.</li> <li>42. Draw-bars—</li> <li>41. Continuous,</li> <li>18. Street-car,</li> <li>Locomotives—</li> <li>19. Side-track push-rods.</li> <li>20. Street-car poles.</li> </ul> |
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## CLASS 105.—RAILWAY ROLLING-STOCK. (XXXIV.)

### Sub-classes.

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| <ul style="list-style-type: none"> <li>4. Axles—</li> <li>Divided—</li> <li>258. Fixed middle bearings,</li> <li>66. With couplings,</li> <li>67. Wheel-attaching devices,</li> <li>68. With sleeved and fixed wheels,</li> <li>Bevel-ended—</li> <li>69. Non-telescoping.</li> <li>63. Car-movers—</li> <li>132. Flange or axle grip,</li> <li>70. Pinch-bars—</li> <li>71. With rail-grip,</li> <li>72. Pushing-jacks,</li> <li>73. Traction-wheels.</li> <li>Cars—</li> <li>133. Bell-cord hangers,</li> <li>74. Dining,</li> <li>14. Dumping—</li> <li>184. Convertible flat and hopper bottom,</li> <li>185. Hopper-bottom,</li> <li>Inclined-bottom—</li> <li>186. Side doors,</li> <li>187. Inwardly-tilting sections,</li> <li>188. Outwardly-tilting sections—</li> <li>189. Displaceable sides,</li> <li>190. Tilting-body—</li> <li>191. Displaceable sides,</li> <li>Express—</li> <li>75. Burglar-proof,</li> <li>Floor-frames,</li> <li>15. Freight—</li> <li>192. Frames,</li> <li>77. Fruit,</li> <li>78. Removable covers,</li> <li>193. Removable side sections,</li> <li>79. Rolling,</li> <li>194. Running boards and rails,</li> <li>182. Stakes—</li> <li>173. Releasable,</li> <li>174. Side-folding,</li> <li>195. Steps and platforms,</li> <li>16. Hand—</li> <li>196. Geared,</li> <li>197. Lamp arrangement,</li> <li>198. Merchandising,</li> <li>Open street—</li> <li>80. Seats,</li> <li>81. Side guards,</li> <li>19. Passenger—</li> <li>5. Baskets,</li> <li>109. Double-deck,</li> <li>200. Dust-guards,</li> <li>82. Emergency-exits,</li> <li>201. Frames,</li> <li>202. Head-rests,</li> <li>83. Individual safes,</li> <li>Platform extensions—</li> <li>84. With gates,</li> <li>Platform-gates,</li> <li>203. Platforms,</li> <li>205. Seat and door arrangement,</li> <li>85. Steps—</li> <li>Extension—</li> <li>86. Folding,</li> <li>87. Sliding,</li> <li>88. With gate,</li> <li>21. Safety-bridges,</li> <li>23. Sleeping—</li> <li>90. Berth-guards,</li> <li>206. Berth-locks,</li> <li>207. Compartment arrangement,</li> <li>208. Convertible seat and berth,</li> <li>89. Curtains and rods,</li> <li>209. Hinged berths,</li> <li>91. Ladders,</li> <li>210. Partitions,</li> <li>211. Seat-back and upper berth,</li> <li>212. Suspended berths,</li> <li>28. Steam street,</li> <li>31. Street—</li> <li>213. Awnings,</li> </ul> | <ul style="list-style-type: none"> <li>Cars—</li> <li>Street—</li> <li>92. Convertible open and closed,</li> <li>35. Hand-straps,</li> <li>214. Reversible,</li> <li>93. Storm-fronts,</li> <li>61. Vestibule.</li> <li>216. Derailers and replacers.</li> <li>94. Derailment-guards—</li> <li>215. Inclined wheels,</li> <li>95. Rail-interlocking,</li> <li>96. Supplemental wheels.</li> <li>Locomotives—</li> <li>217. Belt-gearing,</li> <li>97. Draw-bar lifters,</li> <li>Electric—</li> <li>218. Belt-gearing,</li> <li>219. Friction-roller driven,</li> <li>220. Geared,</li> <li>221. Intermittent-grip,</li> <li>222. Longitudinal gear-shafts,</li> <li>223. Longitudinal worm-shafts,</li> <li>224. Friction-roller driven,</li> <li>225. Intermittent-grip.</li> <li>227. Longitudinal shafts,</li> <li>228. Rack-rail,</li> <li>226. Swinging-bogie,</li> <li>98. Telescoping pilots,</li> <li>99. Traction-increasers—</li> <li>Electric,</li> <li>175. Gripping-drivers.</li> <li>Mail-bag delivery—</li> <li>230. Car-forks,</li> <li>231. Catchers and cranes,</li> <li>232. Cranes.</li> <li>Motors—</li> <li>102. Manually-operated,</li> <li>101. Spring,</li> <li>100. Tread power.</li> <li>60. Sanding devices—</li> <li>176. Chain-feed,</li> <li>177. Oscillatory-feed,</li> <li>Reciprocatory-feed—</li> <li>178. Horizontal,</li> <li>179. Vertical,</li> <li>180. Rotary-feed.</li> <li>233. Single rail—</li> <li>234. Side guides—</li> <li>235. Locomotives.</li> <li>236. Single top and bottom rail.</li> <li>181. Sound-deadening devices.</li> <li>24. Springs—</li> <li>117. Coil,</li> <li>118. Cap and bed plates,</li> <li>119. Coil and rubber,</li> <li>120. Conical volute,</li> <li>121. Elliptic—</li> <li>122. Cap and bed plates,</li> <li>123. Multiple-disk,</li> <li>134. Pneumatic,</li> <li>124. Rubber—</li> <li>125. Cap and bed plates,</li> <li>126. Zigzag.</li> <li>26. Starters.</li> <li>27. Starters and brakes.</li> <li>237. Suspended.</li> <li>Trains—</li> <li>238. Power-transmitters,</li> <li>32. Trucks—</li> <li>135. Anti-friction-wheels,</li> <li>103. Bolsters—</li> <li>104. Cast,</li> <li>105. Guides,</li> <li>106. Pressed-steel,</li> <li>107. Trussed,</li> <li>257. Cable-grip,</li> <li>108. Center bearings—</li> <li>109. Pressed-steel,</li> <li>110. Roller,</li> <li>11. Changeable-gage,</li> <li>Curve-adjusters—</li> <li>Swiveled-wheel,</li> <li>Electric-motor,</li> <li>239. Bogies,</li> <li>240. Equalizing-levers,</li> <li>241. Motor-supporters,</li> <li>242. Rigid-frame.</li> </ul> |
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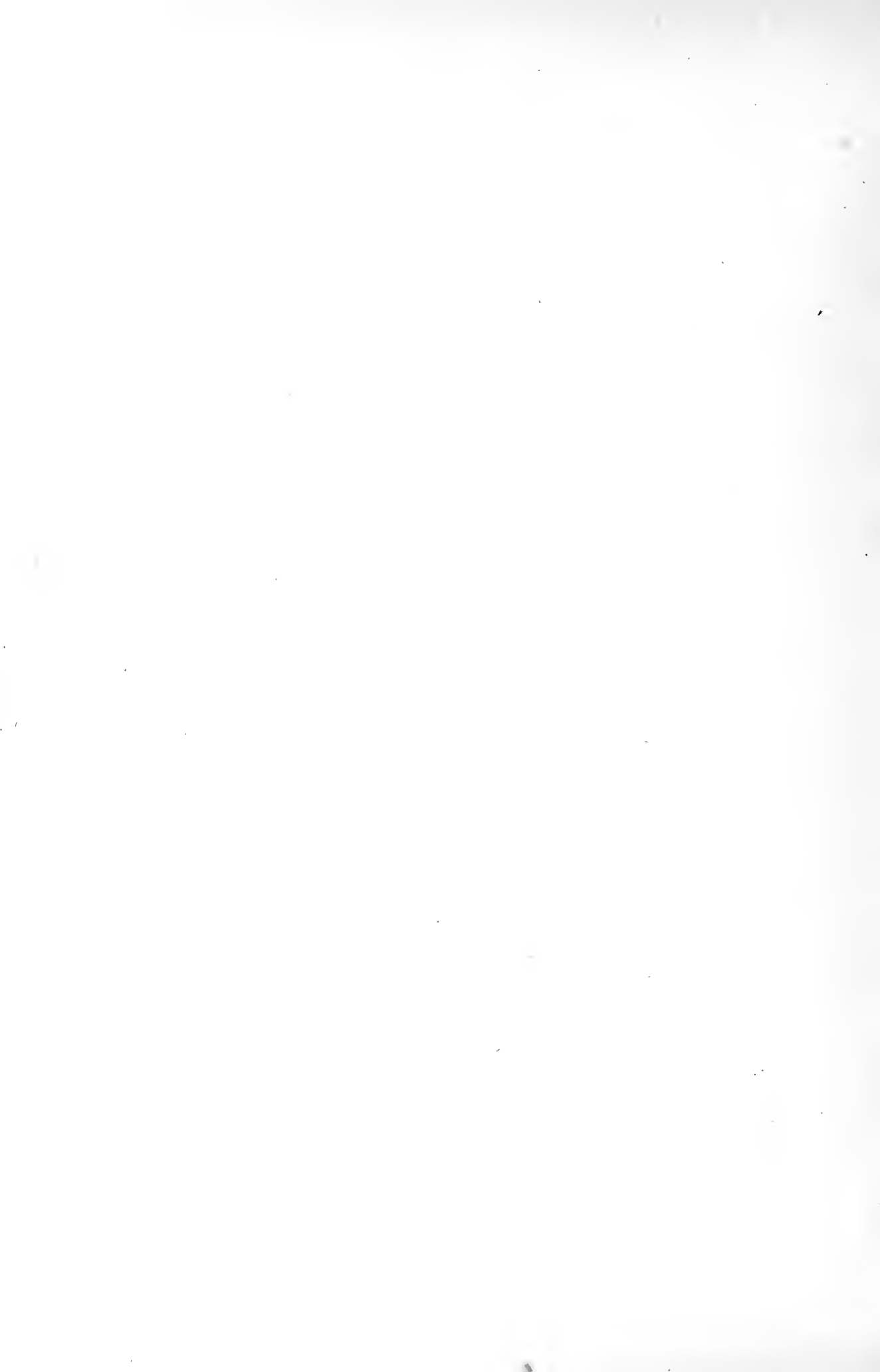
# DIVISION XXXIV.—CONTINUED.

## CLASS 105.—RAILWAY ROLLING STOCK. (XXXIV.)

Continued.

### Sub-classes.

Trucks—	Wheels—
243. Four wheel—	143. Epicycle,
137. Bogies,	Flanges—
Curve-adjusters—	149. Independent movement,
137. Axles, radial,	Integral—
138. Axles, sectional.	Cast—
111. Frames—	150. Hollow webs,
112. Pressed-steel,	151. Roller-bearings,
113. Pedestals,	Spokes—
114. Safety-supporters,	153. Cast in,
115. Side bearings—	Metallic—
116. Roller,	154. Detachable,
Six-wheel—	155. Wooden,
244. Bogies,	156. Tire-fasteners—
Curve-adjusters—	158. Bolted lap-flanges,
139. Axles, radial,	157. By casting,
245. Supplemental.	159. Integral lugs,
246. Velocipedes,	160. Transverse intermedi-
247. Bicycle attachments,	ate keys,
248. Geared.	Tires—
Wheel-bodies—	Cushioned—
140. Cast in tires.	161. Metallic springs,
141. Cast on hubs.	162. Rubber,
33. Wheel-fenders—	163. Wooden blocks,
249. Car and truck equalizer,	164. Loose,
250. Combined brake,	165. Non-metallic,
251. Fixed-scoop,	166. Roller-supported,
252. Folded hinged-scoop,	Webs—
253. Hinged-scoop,	167. Sheet-metal disks—
Inclined—	168. Non-metallic filling,
127. Tilt-up front.	169. Single,
128. Obstacle projectors,	Split castings—
254. Pilot type,	Detachable tires,
Rotary—	170. Wooden,
129. Positively-driven,	171. Webs and tires—
130. Trip and drop-scoop,	172. Pressed-steel.
255. Trip and shoot forward,	182. Wheel-tread surfaces—
256. Wheeled-scoop,	142. Form,
131. Wheel-tread,	143. Multiple,
Wheels—	144. Peripheral rollers,
146. Bushings,	145. Recessed.
147. Counterbalances,	



# SUB-CLASSES ALPHABETICALLY ARRANGED

WITH THE

NUMBER OF PATENTS IN EACH SUB-CLASS ON JANUARY 1, 1895.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub class.	Class.	No. of patents in sub-class.	Division.
Abrading materials and tools.	Grinding and Polishing	336	27	Annunciators—	Electric Signaling	33	16
Absorbent	Driers	12	28	Annunciators	Signals	46	22
Accordions	Music	45	5	Antifriction-wheels	Railway Rolling-Stock	19	34
Accouterments	Accouterments	20	32	(See Trucks.)			
Accumulators	Pumps	19	9	Anti-induction devices	Telephony	101	16
Acids, mineral	Chemicals	146	6	Antiseptics	Preserving	182	6
Actinometers	Photography	3	6	Anvils	Metal-Forging	66	13
Actions, organ	Music	65	5	Apartment-houses	Masonry	29	4
Address-printers	Printing	58	17	Apparatus	Chemicals	87	6
Address-printers—				Apparatus	Composite Roofings and Coverings.	68	15
Strip forms	do	22	17	Apparatus	Fertilizers	42	6
Adhesives	Oils, Fats, and Glue	70	31	Apparatus	Hides, Skins, and Leather	35	31
Aerial navigation	Pneumatics	148	28	Apparatus	Mineral Oils	9	31
Agraffes and bridges.	Music	95	5	Apparatus	Preserving	141	6
Piano				Apparatus—			
Air	Beds	36	8	Reducing gravity	Mineral Oils	20	31
Air and gas pumps—				Apple-parers	Vegetable Cutters and Crushers.	221	25
Hydraulic	Pneumatics	158	28	Applications, general	Electricity. Special Applications.	6	16
Mechanical	do	545	28	Apron vats and stretchers	Bleaching and Dyeing	43	6
Mercury	do	43	28	Aquariums	Water-Distribution	16	9
Rotary	do	366	28	Aqueducts	Hydraulic Engineering	9	4
Air-brushes.	Painting	19	31	Arc and incandescent	Electric Lighting	29	16
Air-cooling apparatus.	Refrigeration	156	28	Arc and incandescent—			
Air-cooling apparatus—				Non-feeding	do	32	16
Air-expansion	do	34	28	Arithmetic	Educational Appliances	73	31
Alarms	Electric Signaling	87	16	Armor-clad	Ships	100	22
Alarms—				Arm-pit-shields	Apparel	69	24
Aequoreal	do	57	16	Arms	Arms and Projectiles. Making	23	13
Barokinetic	do	32	16	Arms and hands.	Artificial Limbs	36	20
Burglar	do	108	16	Article-delivery	Coin-Controlled Apparatus	32	14
Burglar, safe	do	44	16	Article-delivery—			
Alarms	Signals	126	22	Chance	do	10	14
Albums	Bookbinding	83	5	Oscillatory.	do	2	14
Aligners	Type-Writing Machines	13	30	Rotatory	do	59	14
Alloys	Metallurgy	250	3	Rotatory—			
Alphabet-blocks	Educational Appliances	40	31	Sheet-feed	do	30	14
Altitude-instruments	Optics	35	30	Shidable pusher—			
Amalgamators—				Coin-engaged	do	40	14
Electric	Mills	48	25	Detent	do	39	14
Lead	do	51	25	Detent and handle.	do	56	14
Mercury	do	453	25	Spiral	do	9	14
Plate	do	108	25	Articles	Advertising	20	32
Vacuum	do	24	25	Articles	Glass	107	15
Vapor	do	17	25	Articles	Paper-Manufactures	85	17
Ambulances and stretchers.	Carriages and Wagons	34	10	Articles—			
Ammonia	Ammonia, Water, and Wood-Distillation.	50	31	Caoutchouc	Caoutchouc and Minor Plastics.	151	15
Ammonia	Chemicals	55	6	Minor plastics.	do	59	15
Anchor	Ships	147	22	Multiple card	Advertising	17	32
Anchor-trippers	do	41	22	Single card	do	27	32
Anemometers	Measuring-Instruments	8	23	Articulators	Dentistry	32	21
Angle-irons	Metal-Rolling	0	13	Artificial fuel	Fuel	182	15
Animal gates. Backwater and	Sewerage	23	9	Artificial—			
Animal-shears	Cutlery	293	13	Butter	Oils, Fats, and Glue	82	31
Animal-stocks—				Flowers	Fine Arts.	88	15
Gags and muzzles	Care of Live Stock	160	2	Ivory	Caoutchouc and Minor Plastics.	17	5
Hog-traps	do	55	2	Stone, lime, and cement composition.	Artificial Stone, Lime, and Cement.	460	15
Horse and cattle	do	80	2	Artists' appliances	Fine Arts.	84	5
Sheep	do	57	2	Ash-chutes	Masonry	14	4
Annealing apparatus	Annealing and Tempering	32	3	Ash-pans	Steam-Boiler Furnaces	67	18
Annealing apparatus—				Assaying	Metallurgy	13	3
Boxes and pots	do	33	3	Assorting	Silk	6	21
Clamps	do	23	3	Astronomy	Educational Appliances	74	31
Muffles	do	28	3	Atomizers	Surgery	152	6
Ovens	do	23	3	Attaching card-clothing	Wire-Working	13	14
Ovens—				Attachment-holders	Sewing-Machines	59	24
Rotary hearths	do	7	3	Attachments	Plows	69	1
Pits	do	9	3	Attachments	Pumps	157	9
Wire and springs	do	23	3	Attachments	Steam-Boiler Furnaces	59	18
Annealing processes	do	23	3	Attachments	Steam-Boilers	168	18
Annealing processes—				Attachments	Steam-Engines	156	18
Drawing temper	do	27	3	Attachments	Type-Writing Machines	13	30
Gas	do	15	3	Attachments—			
Toughening	do	10	3	Hand, exercising devices.	Music	7	5
Annunciators.	Electric Signaling	52	16				
Annunciators—							
Drop	do	141	16				
Drop system	do	64	16				
Step-by-step	do	91	16				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Attachments—				Bag-machines—			
Harrow .....	Plows .....	69	1	Tube openers and clos-			
Keyboard, exercising	Music .....	17	5	ers—			
Reed-organ .....	do .....	15	5	Openers—	Paper-Manufacturing .....	6	17
Watch-chain .....	Jewelry .....	84	5	Roll .....	do .....	4	17
Audiphones .....	Acoustics .....	9	23	Side .....	do .....	11	17
Anger-handles .....	Woodworking-Tools .....	63	29	Tube-openers .....			
Anger-handles—				Tube-openers—			
Ratchet .....	do .....	14	29	Openers—			
Augers .....	Tools and Implements.	83	13	Roll .....	do .....	6	17
	Making			Side .....	do .....	8	17
Augers .....	Woodworking-Tools .....	136	29	Bags .....	Packing and Storing Vessels	33	32
Augers—				Bags, traveling .....	Baggage .....	60	32
Countersink .....	do .....	89	29	Bag-turning machines .....	Weaving .....	7	21
Detachable-lip .....	do .....	39	29	Balance-escapements .....	Horology .....	128	23
Expandable .....	do .....	46	29	Balanced slide .....	Steam-Engine Valves .....	335	18
Gage attachments .....	do .....	24	29	Balanced slide—			
Autographic registers .....	Printing .....	77	17	Double .....	do .....	63	18
Autoharps .....	Music .....	19	5	Roller .....	do .....	54	18
Automatic .....	Railway-Brakes .....	123	34	Balances .....	Measuring-Instruments .....	164	23
Automatic .....	Telegraphy .....	257	16	Balances—			
Automatic—				Electrical attachments.	do .....	24	23
Draw-bar actuated .....	Railway-Brakes .....	156	34	Equal arms .....	do .....	57	23
Draw-bar actuated—				Pick-up weights .....	do .....	26	23
Centrifugal governor .....	do .....	40	34	Recording .....	do .....	24	23
Winding .....	do .....	48	34	Bale and box hooks .....	Hoisting .....	12	12
Push-rod actuated .....	do .....	103	34	Ballasting .....	Ships .....	28	22
Push-rod actuated—				Balling-heads .....	Carding .....	12	21
Winding .....	do .....	27	34	Ballot-boxes .....	Packing and Storing Vessels .....	10	32
Regulators .....	Wind-Wheels .....	112	28	Ballot-boxes—			
Spindle-lathes .....	Wood-Turning .....	58	29	Ball .....	do .....	8	32
Auxiliary pedals .....	Music .....	33	5	Canceling .....	do .....	4	32
Auxiliary strings .....	do .....	13	5	Closures .....	do .....	11	32
Awings .....	Curtains, Shades, and Screens	256	8	Balls .....	Cordage .....	8	21
Awings .....	Railway Rolling-Stock .....	6	34	Balls and hats .....	Games and Toys .....	95	7
(See Cars, street.)				Ball-traps .....	Firearms .....	98	22
Axes and hatchets .....	Tools and Implements.	109	13	Bandages .....	Surgery .....	140	6
	Making			Bandages—			
Axle-boxes .....	Carriages and Wagons .....	130	10	Bandage-machines .....	do .....	7	6
Axle-gages .....	Wheelwright-Machines .....	49	29	Suspensory .....	do .....	40	6
Axle-skains .....	Carriages and Wagons .....	121	10	Water .....	do .....	20	6
Axles .....	do .....	325	10	Band-cutters and feeders.	Thrashing .....	358	25
Axles .....	Railway Rolling-Stock .....	38	34	Banding .....	Cordage .....	14	21
Axles—				Band-saw .....	Wood-Sawing .....	215	29
Divided, fixed middle	do .....	22	34	Banjos and guitars .....	Music .....	146	5
bearings.				Bank-notes, checks, and	Bookbinding .....	67	5
With couplings .....	do .....	87	34	honds.			
Lubricating .....	Journal-Boxes, Pulleys, and	123	12	Banners and flags .....	Fine Arts .....	11	5
	Shafting.			Bar .....	Matrix-Making .....	6	30
Wheel-attaching de-	Railway Rolling-Stock .....	70	34	Bar, type-writing .....	Type-Writing Machines .....	308	30
vices.				Barbing .....	Wire-Working .....	159	14
With sleeved and fixed	do .....	44	34	Barbing—			
wheels.				Sheet-metal .....	do .....	33	14
Baby-jumpers .....	Surgery .....	68	6	Tools .....	do .....	18	14
Baby-walkers .....	do .....	59	6	Bar-machines—			
Backwater and animal	Sewerage .....	23	9	Plural .....	Linotyping .....	10	30
gates.				Siogle .....	do .....	14	30
Badges .....	Fine Arts .....	24	5	Barometers .....	Measuring-Instruments .....	29	23
Baffles and screens .....	Driers .....	3	28	Barrel-head making .....	Coopering .....	60	29
Bag and twine holders .....	Store-Furniture .....	40	8	Barrel-hoop machines .....	do .....	65	29
Bag-closures .....	Packing and Storing Vessels.	46	32	Barrel-making machines .....	do .....	111	29
Bag-closures—				Barrel-rollers .....	Hoisting .....	30	12
Bar .....	do .....	18	32	Barrel-washers .....	Washing Apparatus .....	50	27
Bag-fasteners .....	do .....	32	32	Barrels .....	Packing and Storing Vessels.	38	32
Bag-fasteners—				(See Paper vessels, bar-			
Cord-tie .....	do .....	17	32	rels.)			
Hinged-jaw .....	do .....	21	32	Barrels—			
Locking-lever .....	do .....	17	32	Wooden .....	do .....	93	32
Strap .....	do .....	11	32	(See Wooden harrels.)			
Baggage-checks .....	Clasps, Buckles, and Buttons	75	11	Bars .....	Metal-Drawing .....	37	13
Bag-holders, bagging	Mills .....	340	25	Base-nut-bridges .....	Bridges .....	11	4
grain.				Base-ball .....	Games and Toys .....	9	7
Bag-holders .....	Store-Furniture .....	38	8	Base key and ratchet .....	Nut and Bolt Locks .....	305	14
Bag-machines .....	Paper-Manufacturing .....	40	17	Base-washer .....	do .....	180	14
Bag-machines—				Basins and stands .....	Baths and Closets .....	335	9
Blank-formers .....	do .....	26	17	Basket-making machines	Coopering .....	32	29
Transverse central-	do .....	22	17	Baskets .....	Packing and Storing Vessels.	160	32
folders.				(See Wooden vessels,			
Triangular folders .....	do .....	7	17	baskets.)			
Tube-closers .....	do .....	31	17	Baskets and buckets,	do .....	33	32
Tube-formers .....	do .....	39	17	(cloth, leather, and rub-			
Tube formers and clos-	do .....	44	17	ber.)			
ers.				Baskets and crates .....	do .....	45	32
Tube formers and open-	do .....	3	17	(See Metallic vessels,			
ers.				baskets and crates.)			
Tube formers, openers,	do .....	24	17	Bathing apparatus .....	Baths and Closets .....	326	9
and closers.				Bathometers .....	Measuring-Instruments .....	42	23
Tube formers, openers,				Baths .....	Electricity. Medical and	41	26
and closers—					Surgical		
Openers—				Baths .....	Photography .....	13	6
Roll .....	do .....	11	17	Bating .....	Hides, Skins, and Leather .....	30	31
Side .....	do .....	5	17	Battening .....	Roofing .....	62	29
Tube openers and clos-	do .....	34	17	Batteries—			
ers.				Anodes .....	Electro-Chemistry .....		3
				Cathodes .....	do .....		3

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Batteries—				Bedsteads—			
Connectors .....	Electro-Chemistry .....	3	3	Sofa—			
Diaphragms .....	do .....	3	3	Folding back and seat .....	Beds .....	59	8
Earth .....	do .....	3	3	Folding-seat .....	do .....	137	8
Gas .....	do .....	3	3	Rotary back and seat .....	do .....	14	5
One-fluid .....	do .....	3	3	Vertically-moving frame .....	do .....	44	8
One-fluid—				Table .....	do .....	48	8
Zinc .....	do .....	3	3	Wardrobe-bedsteads .....	do .....	45	8
Zinc—				Wardrobe-bedsteads—			
Chlorides .....	do .....	3	3	Center-folding .....	do .....	80	8
Chromates .....	do .....	3	3	End-folding .....	do .....	53	8
Nitrates .....	do .....	3	3	Extension .....	do .....	30	8
Oxides .....	do .....	3	3	Shifting-fulcrum .....	do .....	90	8
Sulphates .....	do .....	3	3	Single-frame .....	do .....	285	8
Piles .....	do .....	3	3	Sliding-frame .....	do .....	14	8
Secondary .....	do .....	525	3	Bee-culture—			
Secondary—				Beehives .....	Bee-Culture .....	863	2
Charging and dis- charging .....	do .....	85	3	Hive appliances .....	do .....	135	2
Thermal .....	Electricity. Generation .....	46	26	Beer .....	Alcohol .....	8	31
Two-fluid .....	Electro-Chemistry .....	3	3	Beer—			
Two-fluid—				Coolers .....	Refrigeration .....	344	28
Zinc .....	do .....	46	3	Dispensing .....	Packaging and Dispensing Liquids .....	15	32
Zinc—				Dispensing—			
Chromates .....	do .....	53	3	Barrel-taps .....	do .....	37	32
Nitrates .....	do .....	42	3	Faucet—			
Sulphates .....	do .....	18	3	Foam .....	do .....	27	32
Sulphates—				Pump .....	do .....	16	32
Gravity .....	do .....	60	3	Faucets .....	do .....	8	32
Vessels .....	do .....	3	3	Foam-separators .....	do .....	24	32
Bayonets .....	Firearms .....	22	22	Pipe-cleaners .....	do .....	9	32
Beam-compasses .....	Drafting .....	74	23	Pressure .....	do .....	38	32
Beams .....	Plows .....	57	1	Pressure—			
Beams .....	Railway-Brakes .....	95	34	Gas .....	do .....	17	32
Beam-harvesters .....	Harvesters .....	20	7	Pump .....	do .....	56	32
Bearings .....	Railway Rolling-Stock .....	34	34	Preserving .....	Alcohol .....	17	31
(See Trucks.)				Preserving—			
Bearings .....	Velocipedes .....	65	7	Pasteurizing .....	Alcohol .....	20	31
Bed and cylinder ma- chines .....	Printing .....	109	17	Purifying .....	do .....	24	31
Bed and cylinder ma- chines—				Purifying—			
Cushions .....	do .....	48	17	Finings and shavings .....	do .....	20	31
Multirevolution .....	do .....	17	17	Beetling .....	Cloth-Finishing .....	3	21
Multirevolution—				Bell-cord bangers .....	Railway Rolling-Stock .....	6	34
Perfecting .....	do .....	17	17	(See Cars.)			
Oscillating-cylinder .....	do .....	28	17	Bell-hanging .....	Signals .....	33	22
Oscillating-cylinder—				Bell-hanging—			
Perfecting .....	do .....	10	17	Pulls .....	do .....	28	22
Perfecting .....	do .....	24	17	Ring .....	do .....	42	22
Stop-cylinder .....	do .....	40	17	Belows .....	Pneumatics .....	88	28
Stop-cylinder—				Belows—			
Perfecting .....	do .....	5	17	Organ .....	Music .....	48	5
Traveling-cylinder .....	do .....	47	17	Bell-ringer .....	Steam-Engines .....	29	18
Traveling-cylinder—				Bells .....	Electric Signaling .....	166	16
Perfecting .....	do .....	11	17	Bells .....	Signals .....	134	22
Bed and platen machines	do .....	25	17	Belt-fasteners .....	Hose and Belting .....	275	11
Bed and platen ma- chines—				Belt .....	do .....	180	11
Inking attachment .....	do .....	19	17	Belt-machines .....	do .....	42	11
Oscillating .....	do .....	72	17	Belt-shifters .....	Journal-Boxes, Pulleys, and Shafting .....	277	12
Oscillating—				Belt-stretchers .....	Hose and Belting .....	175	11
Roller and plate inker .....	do .....	78	17	Belt-tighteners .....	Journal-Boxes, Pulleys, and Shafting .....	157	12
Roller-inker .....	do .....	47	17	Bench-dogs .....	Woodworking-Tools .....	84	29
Roller-inker—				Bench-planes .....	do .....	256	29
Orbital .....	do .....	14	17	Bench-planes—			
Stationary roller- inker .....	do .....	17	17	Bit-adjusting .....	do .....	107	29
Roller and plate inker .....	do .....	26	17	Crozes .....	do .....	93	29
Roller-inker .....	do .....	56	17	Gage attachments .....	do .....	93	29
Tympan-gages .....	do .....	58	17	Bending .....	Metal-Bending .....	117	14
Web .....	do .....	27	17	Bending .....	Wire-Working .....	135	14
Bed-bottom .....	Fire Escapes and Ladders .....	17	4	Bending and coiling .....	do .....	15	14
Bed-bottoms—				Bending and twisting .....	do .....	65	14
Fabrics .....	Beds .....	330	8	Bending—			
Fabrics and springs .....	do .....	110	8	By press .....	Metal-Bending .....	46	14
Slats .....	do .....	55	8	By rolls .....	do .....	27	14
Slats and springs .....	do .....	745	8	Beading wood .....	Woodworking-Machines .....	269	29
Springs .....	do .....	452	8	Bent seam .....	Metal-Tube Manufacture .....	21	13
Bed-clothing .....	do .....	16	8	Bertus .....	Railway Rolling-Stock .....	34	34
Bed-pans .....	Baths and Closets .....	46	9	(See Cars, sleeping.)			
Bedsteads .....	Beds .....	106	8	Berths, cabins, and furni- ture .....	Ships .....	118	22
Bedsteads—				Bevel-ended, non-tele- scoping .....	Railway Rolling-Stock .....	9	34
Attachments .....	do .....	23	8	Bevels .....	Measuring-Instruments .....	164	23
Braces .....	do .....	43	8	Beverages .....	Carbonating Beverages .....	20	32
Extension .....	do .....	25	8	Bicycle attachments .....	Railway Rolling-Stock .....	6	34
Folding .....	do .....	86	8	(See Velocipedes.)			
Invalid .....	do .....	165	8	Bicycle-lamps .....	Lamps and Gas-Fittings .....	24	30
Invalid—				Bicycles—			
Head-sections .....	do .....	87	8	Header-preventers .....	Velocipedes .....	8	7
Lifters and conveyers .....	do .....	29	8	Ordinary, rigid-frame .....	do .....	32	7
Vertically-moving frame .....	do .....	54	8	Propulsion—			
Sofa .....	do .....	72	8	Crank and chain .....	do .....	105	7
Sofa—				Crank and gear .....	do .....	113	7
Extension .....	do .....	54	8	Lever and crank .....	do .....	28	7
Folding-back .....	do .....	114	8	Lever and ratchet .....	do .....	57	7

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Bicycles—				Boiler-coverings .....	Composite Roofings and Cov- erings.	246	15
Propulsion—				Boiler feeders. Steam-	Steam-Boilers .....	600	18
Lever, crank and gear, or chain.	Velocipedes .....	20	7	Boilers—			
Lever, ratchet and gear, or chain.	do .....	15	7	Agricultural .....	Stoves and Furnaces .....	283	19
Miscellaneous .....	do .....	9	7	Domestic .....	do .....	414	19
Rack and pinion .....	do .....	17	7	Domestic—			
Safety—				Steamers .....	do .....	307	19
Rigid-frame .....	do .....	80	7	Stand .....	do .....	149	19
Spring-frame .....	do .....	164	7	Steam, sectional .....	Steam-Boilers .....	532	18
Supports .....	do .....	107	7	Bolsters .....	Railway Rolling-Stock .....	28	34
Tandem .....	do .....	20	7	(See Trucks.)			
Biers .....	Undertaking .....	25	20	Bolt-holders .....	Metal-Working Tools .....	27	14
Bilge-water, discharg- ing.	Ships .....	66	22	Bolts .....	Builders' Hardware .....	8	20
Billet-loops .....	Harness .....	50	11	Bolts and nuts, dressing and assembling.	Metal Bolts, Nuts, Rivets, and Screws.	60	13
Bill-files .....	Stationery .....	166	5	Bolts and rivets .....	do .....	156	13
Bill-files—				Bolts and rivets—			
Boxes .....	do .....	25	5	Making .....	do .....	362	13
Boxes—				Bo'ts—			
Separators .....	do .....	53	5	Can .....	Builders' Hardware .....	5	20
Continuous-web .....	do .....	8	5	Double-door .....	do .....	31	20
Division leaves and pockets.	do .....	28	5	Jail-boltwork .....	do .....	20	20
Followers .....	do .....	165	5	Multiple .....	do .....	35	20
Impaling-pins .....	do .....	117	5	Operators .....	do .....	10	20
Packet-holders .....	do .....	59	5	Sliding .....	do .....	137	20
Pins and followers .....	do .....	10	5	Sliding and rotary .....	do .....	34	20
Billiard—				Bomb-lances .....	Projectiles .....	66	22
Appliances .....	Games and Toys .....	80	7	Bonding and tying .....	Masonry .....	53	4
Balls .....	do .....	9	7	Bonds, bank-notes, and checks.	Bookbinding .....	67	5
Chalk-cups .....	do .....	56	7	Bone-black .....	Sugar and Salt .....	119	6
Cues .....	do .....	67	7	Bonnets .....	Apparel .....	40	24
Cone-tip fasteners .....	do .....	19	7	Bonnets and covers .....	Harness .....	100	11
Cushions .....	do .....	84	7	Book and music holders—			
Table-levelers .....	do .....	42	7	Base supported .....	Furniture .....	71	8
Tables .....	do .....	117	7	Base-supported—			
Binders .....	Sewing-Machines .....	87	24	Adjustable .....	do .....	29	8
Binders—				Rotary .....	do .....	7	8
Compressors .....	Harvesters .....	36	7	Body-supported .....	do .....	5	8
Grain-adjusters .....	do .....	100	7	Book-stands .....	do .....	23	8
Sheaf-carriers .....	do .....	132	7	Book-stands—			
Temporary .....	do .....	589	5	Folding .....	do .....	39	8
Binding .....	Bookbinding .....	104	5	Leveling .....	do .....	19	8
Binding-machines .....	do .....	124	5	Bracket-supported .....	do .....	68	8
Bins .....	Store-Furniture .....	49	8	Bracket-supported—			
Bird cages and houses .....	Care of Live Stock .....	191	2	Adjustable .....	do .....	54	8
Bits .....	Metal Boring and Drilling .....	96	13	Leaf-holders .....	do .....	56	8
Bit-sockets .....	Woodworking-Tools .....	188	29	Leaf-rests .....	do .....	13	8
Bit-stocks .....	do .....	75	29	Music-stands .....	do .....	13	8
Bit-stocks—				Music-stands—			
Ratchet .....	do .....	63	29	Portable .....	do .....	40	8
Blackboard-rubbers .....	Stationery .....	124	5	Panel .....	do .....	56	8
Blackboards .....	Educational Appliances .....	75	31	Portfolio .....	do .....	40	8
Blacking box and brush cases.	Brushing and Scrubbing .....	22	27	Book-cases .....	do .....	22	8
Blacking-boxes .....	Packing and Storing Vessels .....	45	32	Book-cases—			
(See Metallic vessels, blackening-boxes.)				Adjustable shelf-parti- tions.	do .....	32	8
Blacking-box holders .....	Brushing and Scrubbing .....	36	27	Adjustable shelves and shelf-supports.	do .....	85	8
Blackening .....	Trees, Plants, and Flowers .....	7	1	Hanging shelves .....	do .....	9	8
Blanket .....	Fire Escapes and Ladders .....	35	4	Knockdown .....	do .....	14	8
Blasting-cartridges .....	Projectiles .....	70	22	Revolving .....	do .....	53	8
Blasting-fuses .....	do .....	84	22	Roller-shelves .....	do .....	24	8
Blasting implements .....	do .....	51	22	Book-clamps .....	Baggage .....	39	32
Blasting-powder .....	Explosives .....	114	6	Book-cover protectors .....	Bookbinding .....	68	5
Bleaching .....	Bleaching and Dyeing .....	77	6	Book-cutting .....	do .....	32	5
Bleaching .....	Paper-Making .....	51	15	Book-leaf holders and marks.	do .....	96	5
Bleaching cane-juice .....	Sugar and Salt .....	38	6	Book-marks and book-leaf holders.	do .....	96	5
Blind-stops .....	Builders' Hardware .....	177	20	Books and binding .....	do .....	75	5
Block and tackle .....	Holsting .....	269	12	Books and covers .....	do .....	182	5
Block and tackle—				Book-sewing .....	Sewing-Machines .....	83	24
Differential pulleys .....	do .....	130	12	Book-stapling .....	Bookbinding .....	175	5
Block-signals, automatic .....	Railways .....	48	4	Book-blackening .....	Coin-Controlled Apparatus .....	2	14
Blocks, musical .....	Music .....	8	5	Book-blackening machines .....	Brushing and Scrubbing .....	59	27
Blotters .....	Stationery .....	110	5	Book-cleaners .....	do .....	68	27
Blowpipes .....	Metallurgy .....	75	3	Bookjacks .....	Boots and Shoes .....	120	11
Boards, drawing .....	Fine Arts .....	92	5	Boots and aprons .....	Carriages and Wagons .....	59	10
Boat-building .....	Boats .....	98	22	Boots and shoes .....	Grinding and Polishing .....	94	27
(See Building.)				Boot-treating machines .....	Boots and Shoes .....	40	11
Boats—				Boot-trees .....	do .....	175	11
Life .....	do .....	268	22	Boring .....	Woodworking-Machines .....	210	29
(See Life boats and rafts.)				Boring and drilling appli- ances.	Metal Boring and Drilling .....	14	13
Sectional and folding .....	do .....	78	22	Boring and reaming .....	Woodworking-Machines .....	11	29
Bobbin and cop builders .....	Spinning .....	21	21	Boring bobs .....	Wheelwright-Machines .....	112	29
Bobbins .....	do .....	162	21	Boring-machines .....	Metal Boring and Drilling .....	83	13
Bobbin-supporters .....	Cordage .....	47	21	Boring, portable .....	Woodworking-Machines .....	101	29
Bodies .....	Carriages and Wagons .....	253	10	Bosom-boards .....	Laundry .....	127	27
Body structure .....	Ordnance .....	111	22	Bottle and can washers .....	Washing Apparatus .....	177	27
Body-wear .....	Electricity. Medical and Surgical .....	193	26	Bottle cases. Can and .. (See Wooden boxes, can and bottle cases.)	Packing and Storing Vessels .....	93	32
Bogies .....	Railway Rolling-Stock .....	34		Bottles and jugs .....	do .....	77	32
(See Locomotives and trucks.)				Bottles and pottery, bottles and jugs.)			
Boiler attachments.	Steam-Boilers .....	168	18				
Steam-							

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Bows and cross-bows....	Firearms.....	36	22	Bridges and agraffes. Pi- ano	Music.....	95	5
Bows. Violin.....	Music.....	21	5	Bridges—			
Boxes, (cloth, leather, and rubber.)	Packing and Storing Vessels	21	32	Arch.....	Bridges.....	16	4
Boxes.....	do.....	88	32	Bowstring.....	do.....	66	4
(See Metallic vessels, boxes.)				Draw.....	do.....	25	4
Boxes—				Draw—			
Paper.....	do.....		32	Bascule.....	do.....	11	4
(See Paper vessels, boxes, angular and and curved.)				Gates.....	do.....	197	4
Post-office.....	Stationery.....	82	5	Lift.....	do.....	10	4
Wooden.....	Packing and Storing Vessels	67	32	Swing.....	do.....	49	4
(See Wooden boxes.)				Ferry-guards.....	do.....	8	4
Box-fasteners.....	Locks and Latches.....	65	20	Floating.....	do.....	19	4
Box-fasteners—				Flooring.....	do.....	5	4
Seal.....	do.....	25	20	Piers.....	do.....	53	4
Sliding-bolt.....	do.....	9	20	Suspension.....	do.....	62	4
Spring-catch.....	do.....	83	20	Truss.....	do.....	426	4
Box-machines.....	Coopering.....	16	29	Violin.....	Music.....	26	5
Box-machines.....	Paper-Manufactures.....	310	17	Bridgework.....	Dentistry.....	25	20
Box-nailing machines.....	Woodworking-Machines.....	104	29	Bridle-bits.....	Harness.....	375	11
Box-openers.....	Woodworking-Tools.....	42	29	Bridles and halters.....	do.....	600	11
Box-scrappers.....	do.....	28	20	Broadcast.....	Seeders and Planters.....	607	1
Bracelets.....	Jewelry.....	277	5	Broadcast—			
Bracket-lamps.....	Lamps and Gas-Fittings.....	35	30	Hand.....	do.....	109	1
Brackets—				Revolving boppers.....	do.....	23	1
Arm-supporting.....	Furniture.....	59	8	Walking.....	do.....	11	1
Arm-supporting—				Bronzing-machines.....	Paper-Making.....	87	15
Adjustable.....	do.....	12	8	Brooches.....	Jewelry.....	154	5
End-supporting.....	do.....	195	8	Broom-machines.....	Brushing and Scrubbing.....	49	27
End-supporting—				Broom-sewing.....	Sewing-Machines.....	14	24
Adjustable.....	do.....	79	8	Brooms—			
Braiders and corders.....	Sewing-Machines.....	93	24	Broom-heads.....	Brushing and Scrubbing.....	174	27
Braiding.....	Cordage.....	115	21	Household.....	do.....	74	27
Braiding—				Stable and yard.....	do.....	23	27
Carriers.....	do.....	23	21	Whisk.....	do.....	25	27
Braids.....	do.....	20	21	Brush and broom bridges.....	do.....	77	27
Brake-flange on wheel....	Railway-Brakes.....	11	34	Brush and broom handles.....	do.....	90	27
Brake-handles.....	do.....			Brush and broom sup- ports.....	do.....	43	27
(See Hand levers and stuffs.)				Brush-cleaners.....	do.....	3	27
Brake-levers.....	Carriages and Wagons.....	131	10	Brushes or rolls—			
Brakes.....	do.....	383	10	Fixed.....	Painting.....	54	31
Brakes.....	Pumps.....	102	9	Reciprocating.....	do.....	17	31
Brakes.....	Railway-Brakes.....	374	34	Brush heads and faces—			
Brakes.....	Velocipedes.....	67	7	Bath and flesh brushes.....	Brushing and Scrubbing.....	23	27
Brakes—				Brush and broom fiber.....	do.....	24	27
Automatic.....	Carriages and Wagons.....	434	10	Dusting-brushes.....	do.....	74	27
Brake-shoes.....	do.....	77	10	Hair-brushes.....	do.....	42	27
Brake-shoes.....	Railway-Brakes.....	10	34	Hat and clothes brushes.....	do.....	23	27
Brake-shoes—				Horse-brushes.....	do.....	26	27
Chills.....	do.....	11	34	Metal-cleaning brushes.....	do.....	12	27
Composite faces.....	do.....	29	31	Metallic tuft-fasteners.....	do.....	17	27
Fasteners.....	do.....	134	34	Molds and molded backs.....	do.....	12	27
Non-metallic.....	do.....	8	34	Nail-brushes.....	do.....	2	27
Rail.....	do.....	5	34	Paint and whitewash brushes.....	do.....	190	27
Recessed faces.....	do.....	23	34	Rotary brushes.....	do.....	56	27
Branding-stamps.....	Printing.....	79	17	Scrubbers.....	do.....	70	27
Bread and cracker ma- chines.....	Bread, Cracker, and Lozenge Making.....	269	15	Shaving-brushes.....	Railroad.....	13	27
Break-water.....	Hydraulic Engineering.....	19	14	Tooth-brushes.....	do.....	48	27
Breast-pumps.....	Surgery.....	33	6	Brush-machines.....	do.....	96	27
Breast-strap slides.....	Harness.....	100	11	Brush-trimming ma- chines.....	do.....	17	27
Breech-loading.....	Ordnance.....	121	22	Buckles.....	Clasps, Buckles, and Buttons.....	1500	11
Breech-loading—				Buckles and snap-hooks combined.....	do.....	75	11
Gas-operated.....	do.....	7	22	Buckles, personal wear.....	do.....	450	11
Recoil-operated.....	do.....	25	22	Buffers.....	Railway Draft Appliances.....	105	34
Brick and tile cutters.....	Clay and Pottery.....	115	15	Buffers.....	Railways.....	49	4
Brick-kilns—				Buffers, fluid-pressure.....	Railway Draft Appliances.....	10	34
Continuous.....	do.....	77	15	Builders' hardware.....	Hardware-Making.....	71	13
Continuous—				Building.....	Boats.....	98	22
Tunnels.....	do.....	85	15	Building.....	Ships.....	228	22
Downdraft.....	do.....	80	15	Building-blocks, toy.....	Games and Toys.....	128	7
Furnaces.....	do.....	59	15	Buildings.....	Iron Structures.....	82	4
Reversible-draft.....	do.....	26	15	Bullets and shot.....	Arms and Projectiles. Mak- ing.....	42	13
Updraft.....	do.....	156	15	Bumpers, rigid.....	Railway Draft Appliances.....	6	34
Vertical.....	do.....	17	15	Bunching-machines.....	Vegetable Cutters and Crush- ers.....	7	25
Brick-machines—				Buoyant propellers.....	Marine Propulsion.....	50	22
Hydraulic.....	do.....	17	15	Buoys and safes.....	Boats.....	47	22
Reciprocating.....	do.....	422	15	Bureaus.....	Furniture.....	20	8
Rotary—				Bureaus, knockdown.....	do.....	17	8
Horizontal.....	do.....	106	15	Burglar-alarms—			
Vertical.....	do.....	101	15	Combined.....	Signals.....	57	22
Screw.....	do.....	240	15	Detonating.....	do.....	191	22
Traveling molds.....	do.....	76	15	Miscellaneous.....	do.....	19	22
Brick-making imple- ments.....	do.....	59	15	Blowing.....	do.....	299	22
Brick-molds.....	do.....	102	15	Burglar-proof.....	Railway Rolling-Stock.....	30	34
Brick-molds—				(See Cars, express.)			
Sanders.....	do.....	43	15	Burglar-proof.....	Safes.....	166	20
Bricks.....	Masonry.....	30	4	Burial apparatus.....	Undertaking.....	9	20
Brick settings. Stone and.....	do.....	133	15	Burial apparatus—			
Bridge-guards.....	Railways.....	8	4	Grave-fillers.....	do.....	10	20
Bridge-irons.....	Hardware-Making.....	99	13				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Borlal apparatus—				Cannon and ball .....	Arms and Projectiles. Mak-	64	13
Raising and lowering ..	Undertaking .....	42	20	Can-openers .....	ing	178	13
Burners—				Canopy shades and re-	Cutlery .....	147	30
Hay and straw .....	Stoves and Furnaces .....	72	19	flectors.	Lamps and Gas-Fittings .....		
Refuse .....	do .....	83	19	Cant-dogs .....	Woodworking-Tools .....	70	29
Burnishing .....	Boots and Shoes .....	400	11	Canteens and flasks .....	Baggage .....	32	32
Burnishing .....	Photography .....	61	6	Canvas-stretchers .....	Fine Arts .....	40	5
Burnishing .....	Sheet-Metal Ware. Making .....	46	14	Cap-hoxes .....	Projectiles .....	22	22
Burring .....	Carding .....	71	21	Capes and shawls .....	Apparel .....	35	24
Burrs and sinkers .....	Knitting and Netting .....	44	21	Cap-filling .....	Projectiles .....	15	22
Bushings .....	Railway Rolling-Stock .....	6	34	Capping-machines .....	Packaging and Dispensing	33	32
(See Wheels.)					Liquids.		
Bustles .....	Crinoline and Corsets .....	266	24	Capping-machines—	do .....	7	32
Butchers' stalls .....	Butchering .....	3	25	Hand-tools .....	do .....	15	32
Butter and cheese cutters ..	Dairy .....	105	2	Magazine-feed .....	do .....	42	13
Butter and cheese. Man-	do .....	33	2	Capping screws and nails.	Metal Bolts, Nuts, Rivets,		
ufacture of .....					and Screws.		
Butter workers and molds	do .....	382	2	Capstans and windlasses.	Hoisting .....	78	12
Buttons .....	Clasps, Buckles, and Buttons	70	11	Capstans and windlasses—			
Button-fasteners .....	do .....	450	11	Capstans .....	do .....	76	12
Buttonhole .....	Sewing-Machines .....	521	24	Drum and clutch .....	do .....	58	12
Buttonhole-cutters .....	Cutlery .....	100	13	Hand-crank operated .....	do .....	127	12
Button machines and dies	Caoutchouc and Minor Plas-	35	15	Lever-operated .....	Elevators .....	104	12
	tics.			Steam-winch .....	Hoisting .....	26	12
Button-making machines.	Clasps, Buckles, and Buttons	150	11	Sweep-operated .....	do .....	49	12
Buttons .....	do .....	750	11	Wild-cats .....	do .....	18	12
Buttons—				Windlass with capstan.	do .....	47	12
Hinged shoe .....	do .....	450	11	Capsule-machines .....	Surgery .....	95	6
Separable .....	do .....	300	11	Capsules .....	Medicines .....	14	6
Buttons and clasps .....	Metal Personal Wear. Mak-	61	14	Car .....	Roofing .....	96	29
	ing .....			Car and locomotive irons.	Wagon, Car, and Track Irons	128	13
Button-setting machines	do .....	200	11	Car axles and boxes.	do .....	50	13
Button-setting tools .....	do .....	200	11	Making .....			
Buzzer and whistliggs .....	Games and Toys .....	116	7	Carbonators .....	Carbonating Beverages .....	14	32
Cab-door openers .....	Fences .....	14	1	Carbonators—			
Cabinets .....	Store-Furniture .....	2	8	Beer .....	do .....	14	32
Cabinets—				Beer—			
Delivering .....	do .....	46	8	Atomizer .....	do .....	16	32
Grocers' .....	do .....	13	8	Pressure .....	do .....	12	32
Spool .....	do .....	33	8	Pump .....	do .....	12	32
Cable-laying .....	Hydraulic Engineering .....	17	4	Rotary mixer .....	do .....	15	32
Cables and cable-stoppers.	Ships .....	38	22	Spray .....	do .....	25	32
Caissons .....	Hydraulic Engineering .....	26	4	Carbonators and genera-	do .....	10	32
Caissons, ship .....	do .....	14	4	tors.			
Cake-cutters .....	Bread, Cracker, and Lozenge	41	15	Carbonators and genera-	do .....		
	Making .....			tors—			
Cake-turners .....	Kitchen and Table Articles.	2	8	Portable .....	do .....	18	32
Calculators .....	Measuring-Instruments .....	274	23	Carbon compounds .....	Chemicals .....	170	6
Calculators—				Carbon dyes .....	Bleaching and Dyeing .....	676	6
Tabular .....	do .....	138	23	Carburetors .....	Gas .....	502	31
Calendars .....	Stationery .....	131	5	Carburetors—			
Calendars—				Carbureting-lamps .....	do .....	105	31
Continuous-web .....	do .....	31	5	Float-vaporizers .....	do .....	52	31
Disk .....	do .....	71	5	Gas and air mixers .....	do .....	52	31
Roller .....	do .....	28	5	Jet-mixers .....	do .....	94	31
Calendering .....	Cloth-Finishing .....	8	21	Oil-feed .....			
Calendering .....	Paper-Making .....	119	15	Float valves .....	do .....	45	31
Calipers and dividers .....	Drafting .....	208	23	Rotary .....	do .....	25	31
Calipers—				Revolving .....	do .....	71	31
Dial .....	Measuring-Instruments .....	43	23	Card-clothing .....	Carding .....	31	21
Stem .....	do .....	14	23	Card-exhibitors .....	Advertising .....	65	32
Calks .....	Farriery .....	79	14	Card-exhibitors—			
Calk-sharpeners .....	do .....	28	14	Droppers .....	do .....	70	32
Call-bells .....	Signals .....	69	22	Rotary .....	do .....	50	32
Calls .....	Telephony .....	63	16	Sliding .....	do .....	30	32
Calls—				Carding .....	Carding .....	173	21
Reed .....	do .....	24	16	Card-door openers .....	Fences .....	36	1
Step-by-step .....	do .....	138	16	Card racks .....	Advertising .....	50	32
Strength and polarity .....	do .....	33	16	Card-movers .....	Railway Rolling-Stock .....	10	34
Camels and floating docks.	Ships .....	38	22	Car-movers—			
Cameras .....	Photography .....	209	6	Flange or axle grip .....	do .....	40	34
Cameras—				Pinch-bars .....	do .....	17	34
Magazine .....	do .....	93	6	Pinch-bars—			
Panoramic .....	do .....	14	6	With rail-grip .....	do .....	33	34
Camera-stands .....	do .....	52	6	Pushing-jacks .....	do .....	49	34
Camp .....	Beds .....	179	8	Traction-wheels .....	do .....	12	34
Camp and lunch kits .....	Baggage .....	88	32	Carpet-cleaners .....	Brushing and Scrubbing .....	149	27
Cams and eccentrics .....	Machine Elements .....	181	12	Carpet-fasteners .....	Builders' Hardware .....	17	20
Canals .....	Hydraulic Engineering .....	29	4	Carpet-fasteners—			
Canals—				Clasp .....	do .....	17	20
Gates, bear-trap .....	do .....	22	4	Moldings .....	do .....	40	20
Gate-valves .....	do .....	22	4	Strips .....	do .....	31	20
Lock-gates .....	do .....	40	4	Tack-fasteners .....	do .....	31	20
Can and bottle cases .....	Packing and Storing Vessels	93	32	Carpet-lining .....	Paper-Making .....	145	15
(See Wooden boxes, can				Carpet-rag loopers .....	Weaving .....	25	21
and bottle cases.)				Carpet-stretchers .....	Furniture .....	290	8
Candle apparatus .....	Oils, Fats, and Glue .....	80	31	Carpet stretchers and	do .....	81	8
Candles .....	do .....	53	31	tackers.			
Candlesticks .....	Lamps and Gas-Fittings .....	157	30	Carpet-sweepers .....	Brushing and Scrubbing .....	236	27
Candlesticks—				Car-pat-form door-open-	Fences .....	39	1
Miners' .....	do .....	22	30	ers.			
Canes .....	Umbrellas and Canes .....	81	24	Car-replacers .....	Railways .....	177	4
Cane-strippers .....	Thrashing .....	64	25	Carriage—			
Canisters .....	Packing and Storing Vessels.	118	32	Bow-setters .....	Wheelwright-Machines .....	16	29
(See Metallic vessels,							
canisters.)							

\*Reissues.



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Carriage—				Cars—			
Clips and shackles.....	Wagon, Car, and Track Irons	62	13	Street—			
Irons.....	Carriages and Wagons.....	118	10	Convertible open and closed	Railway Rolling-Stock.....	28	34
Irons—				Hand-straps.....	do.....	14	34
Miscellaneous.....	Wagon, Car, and Track Irons	196	13	Reversible.....	do.....	7	34
Lamps.....	Lamps and Gas-Fittings.....	30	30	Storm-fronts.....	do.....	9	34
Carriages.....	Ordnance.....	35	22	Vestibule.....	do.....	93	34
Carriagee.....	Type-Writing Machines.....	250	30	Car-signals.....	Signals.....	86	22
Carriers—				Cartridge—			
Elevated.....	Hoisting.....	116	12	Belts.....	Accouterments.....	35	32
Luggage.....	Velocipedes.....	7	7	Boxes.....	do.....	72	32
Store-service.....	Store-Service.....	17	12	Boxes—			
Cars—				Cartridge-feed.....	do.....	26	32
Bell-cord hangers.....	Railway Rolling-Stock.....	6	34	Feed-cases.....	Ordnance.....	29	22
Dining.....	do.....	5	34	Implements.....	Projectiles.....	244	22
Dumping.....	do.....	63	34	Loading.....	do.....	159	22
Dumping—				Cartridges.....	do.....	443	22
Convertible flat and hopper bottom.....	do.....	17	34	Cartridges and caps.....	Arms and Projectiles. Making.....	106	13
Hopper-bottom.....	do.....	54	34	Cartridges, electric.....	Projectiles.....	12	22
Inclined bottom, side doors.....	do.....	20	34	Car-wheels and tires.....	Wagon, Car, and Track Irons	117	13
Inwardly-tilting sections.....	do.....	15	34	Cases—			
Outwardly-tilting sections.....	do.....	16	34	Organ.....	Music.....	59	5
Outwardly-tilting sections—				Piano.....	do.....	72	5
Displaceable sides.....	do.....	16	34	Ticket.....	Stationery.....	140	5
Tilting body.....	do.....	30	31	Cash-registers.....	Measuring-Instruments.....	323	23
Tilting body—				Cash-registers—			
Displaceable sides.....	do.....	94	34	Rotating indicators.....	do.....	227	23
Express, burglar-proof.....	do.....	30	34	Casing-heads.....	Artesian and Oil Wells.....	56	25
Floor-frames.....	do.....	31	34	Casks.....	Packing and Storing Vessels.....	66	32
Freight.....	do.....	161	34	(See Metallic vessels, casks.)			
Freight—				Castanets.....	Music.....	10	5
Frames.....	do.....	39	34	Casters.....	Builders' Hardware.....	193	20
Fruit.....	do.....	12	34	Casters—	Kitchen and Table Articles.....	73	8
Removable covers.....	do.....	14	34	Antifriction-rollers—			
Removable side sections.....	do.....	12	34	Loose.....	Builders' Hardware.....	41	20
Rolling.....	do.....	15	34	Pivoted.....	do.....	66	20
Running boards and rails.....	do.....	6	34	Ball.....	do.....	26	20
Stakes.....	do.....	13	34	Ball—			
Stakes—				Antifriction-roller.....	do.....	39	20
Releasable.....	do.....	21	34	Pivoted.....	do.....	14	20
Side-folding.....	do.....	15	34	Pintle-retainers.....	do.....	66	20
Steps and platforms.....	do.....	7	34	Rotary.....	Kitchen and Table Articles.....	42	8
Hand.....	do.....	11	34	Sewing-machine.....	Builders' Hardware.....	76	20
Hand—				Spring.....	do.....	13	20
Geared.....	do.....	64	34	Wheels.....	do.....	21	20
Lamp arrangement.....	do.....	6	34	Catamenial sacks.....	Surgery.....	60	6
Merchandizing.....	do.....	7	34	Catapults.....	Firearms.....	68	22
Open street—				Catching and holding tools.....	Care of Live Stock.....	53	2
Seats.....	do.....	10	34	Cattle.....	Pumps.....	57	9
Side-guards.....	do.....	11	34	Cattle-guards, railway-gates.....	Fences.....	103	1
Passenger.....	do.....	76	34	Coiling-blocks.....	Electric Lighting.....	69	16
Passenger—				Ceiling center-pieces.....	Carpentry.....	7	29
Baskets.....	do.....	15	34	Ceilings and floors—			
Double-deck.....	do.....	13	34	Concrete.....	Fireproof Buildings.....	8	4
Dust-guards.....	do.....	5	34	Concrete and metal.....	do.....	80	4
Emergency-exits.....	do.....	32	34	Metal.....	do.....	10	4
Frames.....	do.....	37	34	Protected wood.....	do.....	31	4
Head-rests.....	do.....	6	34	Tile.....	do.....	57	4
Individual safes.....	do.....	7	34	Tile and metal.....	do.....	69	4
Platform-extensions with gates.....	do.....	5	34	Cellars.....	Masonry.....	20	4
Platform-gates.....	do.....	8	34	Celluloid.....	Caulchouc and Minor Plastics.....	344	15
Platforms.....	do.....	21	34	Cementation and case-hardening.....	Annealing and Tempering.....	15	3
Seat and door arrangement.....	do.....	13	34	Cementation and case-hardening—			
Steps.....	do.....	11	34	Compounds.....	do.....	71	3
Steps—				Gaseous.....	do.....	20	3
Extension, folding.....	do.....	35	34	Liquid.....	do.....	15	3
Extension, sliding.....	do.....	28	34	Centerboards and keels.....	Ships.....	126	22
With gate.....	do.....	17	34	Centerers.....	Metal Turning, Planing, and Milling.....	70	13
Safety-bridges.....	do.....	44	34	Centering.....	Masonry.....	25	4
Sleeping.....	do.....	271	34	Center-seals and by-pass valves.....	Gas.....	20	31
Sleeping—				Centrifugal creamers.....	Dairy.....	9	2
Berth-guards.....	do.....	8	34	Centrifugal machines.....	Sugar and Salt.....	278	6
Berth-hooks.....	do.....	7	34	Centrifugal machines—			
Compartment arrangement.....	do.....	15	34	Honey-extractors.....	do.....	24	6
Convertible seat and berth.....	do.....	17	34	Liquid-separators.....	do.....	102	6
Curtains and rods.....	do.....	9	34	Testers.....	do.....	18	6
Hinged berths.....	do.....	14	34	Chale-irons.....	Carriages and Wagons.....	62	10
Ladders.....	do.....	10	34	Chain.....	Hydraulic Motors.....	62	9
Partitions.....	do.....	7	34	Chain.....	Pumps.....	236	9
Seat-back and upper berth.....	do.....	25	34	Chain and double chain.....	Sewing-Machines.....	349	24
Suspended berths.....	do.....	9	34	Chain and link making.....	Chains, Staples, and Horse-shoes.....	222	13
Steam street.....	do.....	23	34	Chain-grates.....	Steam-Boiler Furnaces.....	59	18
Street.....	do.....	52	34	Chain-propellers.....	Marine Propulsion.....	70	22
Street—				Chains.....	Chains, Staples, and Horse-shoes.....	49	13
Awnings.....	do.....	6	34				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Chairs—				Chop-graders—			
Ornamental.....	Jewelry.....	166	5	*Flour processes.....	Mills.....	93	25
Chairs.....	Chairs.....	143	8	Gravity.....	do.....	112	25
Chairs.....	Coin-Controlled Apparatus.....	5	14	Rotary bolts.....	do.....	395	25
Chairs.....	Railways.....	225	4	Shaking bolts.....	do.....	421	25
Chairs—				Chopping-blocks.....	Butchering.....	15	25
Adjustable backs.....	Chairs.....	120	8	Christmas-tree lights.....	Lamps and Gas-Fittings.....	40	30
Adjustable backs and seats.....	do.....	46	8	Checks for rock-drills.....	Stone-Working.....	44	25
Attachments.....	do.....	50	8	Churns.....	Dairy.....	61	2
Backs and seats, independently-adjustable.....	do.....	48	8	Churns—			
Bottoms.....	do.....	156	8	Double-acting.....	do.....	122	2
Convertible.....	do.....	142	2	Reciprocating.....	do.....	17	2
Dentists'.....	do.....	130	8	Combined lever and crank mechanism.....	do.....		
Folding.....	do.....	353	8	Crank mechanism—			
Folding—				Multiple-dasher.....	do.....	98	2
Adjustable.....	do.....	131	8	Single-dasher.....	do.....	213	2
Invalid.....	do.....	21	8	Foot mechanism.....	do.....	8	2
Nursery.....	do.....	182	8	Hand and foot mechanism.....	do.....	9	2
Opera.....	do.....	111	8	Lever mechanism—			
Pads and feet.....	do.....	91	8	Multiple-dasher.....	do.....	37	2
Reclining.....	do.....	223	8	Single-dasher.....	do.....	103	2
Rocking.....	do.....	98	8	Rocking-seat mechanism.....	do.....	21	2
Rocking—				Without operating mechanism.....	do.....	282	2
Platform.....	do.....	193	8	Rotary—			
Step-ladder.....	do.....	35	8	Diagonal-dasher.....	do.....	16	2
Surgical.....	do.....	43	8	Horizontal double-dasher—			
Swinging.....	do.....	26	8	Concentric shafts.....	do.....	28	2
Tilting.....	do.....	164	8	Parallel shafts.....	do.....	30	2
Chairs and couches.....	Electricity, Medical and Surgical.....	17	26	Horizontal single-dasher.....	do.....	301	2
Chalk-line bolders.....	Woodworking-Tools.....	27	29	Vertical double-dasher—			
Chandeliers, Gas.....	Lamps and Gas-Fittings.....	73	30	Concentric shafts.....	do.....	113	2
Change-receivers.....	Advertising.....	25	32	Parallel shafts.....	do.....	74	2
Channeling-machines.....	Boots and Shoes.....	100	11	Vertical single-dasher.....	do.....	337	2
Channeling-machines.....	Stone-Working.....	76	25	Vibrating.....	do.....	249	2
Charcoal—				Working body.....	do.....	443	2
Kilns.....	Charcoal and Coke.....	25	31	Chutes.....	Fire Escapes and Ladders.....	71	4
Processes.....	do.....	18	31	Chutes.....	Hoisting.....	170	12
Retorts.....	do.....	8	31	Chutes—	Hydraulic Engineering.....	25	4
Charts.....	Music.....	10	5	Screens.....	do.....	9	4
Charts—				Water-power.....	do.....	16	4
Harmony and transposition.....	do.....	38	5	Chute-wagons.....	Carriages and Wagons.....	99	10
Chases.....	Printing.....	43	17	Cigar and cigarette cutters.....	Tobacco.....	56	2
Check-hooks and terrets.....	Harness.....	200	11	Cigar-bundling.....	do.....	29	2
Checking and unchecking.....	do.....	100	11	Cigar-cutters, tip.....	do.....	71	2
Check-punches.....	Printing.....	111	17	Cigar-lighting lamps.....	Lamps and Gas-Fittings.....	25	30
(See Hand-stamps, check-punches.)				Cigar-machine aprons.....	Tobacco.....	17	2
Check-row.....	Seeders and Planters.....	566	1	Cigar-machines.....	do.....	63	2
Checks, bank-notes, and bonds.....	Bookbinding.....	67	5	Cigar-machines—			
Checks—				Adjuncts.....	do.....	38	2
Escapement.....	Fire Escapes and Ladders.....	21	4	Apron.....	do.....	17	2
Fluid.....	do.....	21	4	Apron—			
Fly.....	do.....	10	4	Moving rolling-table.....	do.....	46	2
Governor.....	do.....	46	4	Stationary rolling-table.....	do.....	147	2
Check-valves.....	Water-Distribution.....	134	9	Endwise-moving filler.....	do.....	63	2
Cheese-hoops.....	Dairy.....	52	2	One traveling apron.....	do.....	53	2
Cheese-turners.....	do.....	15	2	Roller.....	do.....	78	2
Cheese-vats and curd-breakers.....	do.....	125	2	Two traveling aprons.....	do.....	19	2
Chenille.....	Weaving.....	13	21	Cigar-makers' implements.....	do.....	10	2
Chenille-machines.....	do.....	22	21	Cigar-makers' implements—			
Chest-protectors.....	Surgery.....	6	6	Wrapper-cutters.....	do.....	24	2
Children's carriages.....	Carriages and Wagons.....	295	10	Cigar-perforators.....	do.....	54	2
Children's carriages—				Cigars, cigarettes, and cartridges.....	do.....	74	2
Folding.....	do.....	79	10	Cigar supports and stands.....	do.....	48	2
Stops.....	do.....	52	10	Circuit-closers.....	Telegraphy.....	131	16
Children's seats.....	Velocipedes.....	28	7	Circuit-closers—			
Chills.....	Railway-Brakes.....	34		Burglar.....	do.....	50	16
(See Brake-shoes.)				Lock.....	do.....	28	16
Chimney-cleaners—				Retarded.....	do.....	21	16
Flue and stovepipe.....	Brushing and Scrubbing.....	65	27	Thermal.....	do.....	175	16
Lamp.....	do.....	79	27	Circuits and systems.....	do.....	159	16
Chimney-bolders.....	Lamps and Gas-Fittings.....	33	30	Circular—			
Chimneys and cowl—				Circular machines.....	Knitting and Netting.....	85	21
Rotary.....	Pneumatics.....	189	28	Door.....	Safes.....	33	20
Stationary.....	do.....	443	28	Independent needles.....	Knitting and Netting.....	450	21
Chimneys—				Looper pin and hook machines.....	do.....	35	21
Composite.....	Lamps and Gas-Fittings.....	94	30	Circular saw.....	Wood-Sawing.....	298	29
Double.....	do.....	5	30	Circular saw—			
Integral.....	do.....	73	30	Angular.....	do.....	88	29
Chin-rests, violin.....	Music.....	30	5	Fire-wood.....	do.....	47	29
Chisels.....	Woodworking-Tools.....	66	29	Radial.....	do.....	46	29
Chisels—							
Gage.....	do.....	17	29				
Chock-block.....	Railway-Brakes.....	34					
(See Wheel and rail.)							
Chop-graders—							
Bran-dusters—							
Beaters.....	Mills.....	148	25				
Brushes.....	do.....	62	25				
Electric purifiers.....	do.....	8	25				

\* Approximate on account of number of cases without drawings.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Circular saw—				Coal-oil—			
Traveling	Wood-Sawing	118	29	Retorts—			
Circulation	Steam-Boilers	236	18	Rotary	Mineral Oils	13	31
Circulation-machines	Lino-typing	27	30	Coal, purifying	Fuel	16	15
Cisterns	Masonry	61	4	Coal-scuttles	Packing and Storing Vessels	170	32
Clamps	Laundry	11	27	(See Metallic vessels, coal-scuttles.)			
Clamps	Woodworking-Tools	51	29	Coal-hangers	Apparel	10	24
Clamps—				Coating	Paper-Making	243	15
Box-and-miter	do	59	29	Coating and embossing	Caoutchouc and Minor Plas- tics.	34	15
Pivoted-jaw	do	43	29	moldings.			
Single-screw	do	69	29	Coats and vests	Apparel	165	24
Sliding-jaw	do	71	29	Cocks and faucets—			
Clarinet and flutes	Music	35	5	Compound	Water-Distribution	109	9
Clasps	Clasps, Buckles, and Buttons	750	11	Reciprocating valves	do	865	9
Clasps—				Sliding gates	do	332	9
Pencil	Stationery	95	5	Tank	do	467	9
Cleaners	Plows	74	1	Thermal	do	37	9
Cleaners	Steam-Boilers	247	18	Tube-compressors	do	26	9
Cleaners	Type-Writing Machines	35	30	Turning plugs	do	347	9
Cleaners—				Cocoaneries	Silk	7	21
Steam or air jet	Steam-Boilers	84	18	Coffee and tea pots	Stoves and Furnaces	726	19
Cleaning	Artesian and Oil Wells	55	25	Coffee-mills	Mills	117	25
Cleaning	Sewerage	24	9	Coffer-dams	Hydraulic Engineering	31	4
Cleaning	Silk	4	21	Coffins	Undertaking	91	20
Cleavers	Spinning	30	21	Coffins—			
Cleats and belaying-pins	Ships	35	22	Brackets	do	6	20
Clevises	Plows	255	1	Corners	do	20	20
Clips	Carriages and Wagons	60	10	Fasteners	do	109	20
Clips—				Head-rests	do	27	20
Paper	Stationery	240	5	Lids	do	78	20
Clock-cases	Horology	73	23	Life-signals	do	6	20
Clocks	do	158	23	Linings and coverings	do	27	20
Clocks—				Metallic	do	65	20
Calendar	do	119	23	Plastic material	do	54	20
Electric	do	300	23	Shields	do	8	20
Geographical	do	28	23	Wooden	do	20	20
Pneumatic	do	21	23	Coilers	Carding	14	21
Clock-striking	do	118	23	Coiling	Coopering	55	29
Clock-winding	do	58	23	Coiling	Metal-Bending	38	14
Clod-crushers	Harrows and Diggers	28	1	Coiling	Wire-Working	11	14
Clod-crushers—				By mandrel—			
Barred and corrugated rollers	do	22	1	Definite length	do	55	14
Drag-bars	do	19	1	Indefinite length	do	47	14
Drag-bars and harrows	do	79	1	By rolls	do	19	14
Toothed rollers and wheels	do	40	1	Coiling and bending pipe	Metal-Bending	75	14
Close carriages	Carriages and Wagons	80	10	Coin-counters	Measuring-Instruments	148	23
Closet-cisterns	Baths and Closets	422	9	Coin packages	do	69	23
Close vats	Bleaching and Dyeing	42	6	Coin-testers	do	32	23
Clothes-clamps	Beds	43	8	Coke—			
Clothes-driers	Laundry	757	27	Processes	Charcoal and Coke	21	31
Clothes-line fasteners	do	204	27	Retort-ovens	do	21	31
Clothes-line reels	do	56	27	Coke-ovens	do	44	31
Clothes-lines	do	139	27	Coke-ovens—			
Clothes-pin machines	Woodworking-Machines	8	29	Chargers and discharg- ers	do	19	31
Clothes-pounders	Laundry	196	27	Doors	do	11	31
Clothes sticks and tongs	do	25	27	Dumping-bottoms	do	11	31
Clod-measuring ma- chines	Measuring-Instruments	157	23	Cold	Preserving	42	6
Cloth, ornamenting	Fine Arts	76	5	Collapseable tube	Pumps	25	9
Clover-harvesters	Harvesters	54	7	Collapseable tube conduc- tors.	Electricity. Electric Rail- ways.	15	26
Clover-hullers	Thrashing	173	25	Collar, cuff, and bosom machines.	Paper-Manufactures	108	17
Clutches	Clutches	38	12	Collar-fasteners	Harness	125	11
Clutches—				Collar-machines	do	100	11
Eccentric or wedge	do	22	12	Collars and cuffs	Apparel	298	24
Expansible segment	do	49	12	Collars and tops	Lamps and Gas-Fittings	67	30
Fluid	do	8	12	Coloring	Photography	50	6
Frictional and positive	do	19	12	Coloring and polishing	Hides, Skins, and Leather	19	31
Intermittent-grip	do	195	12	apparatus.			
Intermittent-grip—				Coloring and polishing	do	76	31
Ratchet	do	89	12	processes.			
Strap and dog or ball	do	166	12	Color-machines	Printing	52	17
Lever-shoe	do	35	12	Color-machines—			
Locking-pawl	do	83	12	Coloring-tools	do	33	17
Longitudinally-mov- able—				Colters	Plows	207	1
Double-face	do	97	12	Colters—			
Single-face	do	189	12	Rolling	do	155	1
With projections	do	189	12	Columns and timber	Fireproof Buildings	13	4
Magnetic	do	9	12	Comb-dabbing mechanism	Carding	14	21
Multiple-disk	do	17	12	Combination-garments	Apparel	114	24
Radially-movable shoes.	do	126	12	Combination organ stop- actions.	Music	23	5
Radially-movable shoes—				Combined cane and um- brella.	Umbrellas and Canes	51	24
Opposing	do	42	12	Combined dish cleaners and drainers.	Washing Apparatus	46	27
Split-ring	do	107	12	Combined engine and boiler.	Steam-Engines	79	18
Strap	do	55	12	Combined mop heads and wringers.	Brushing and Scrubbing	86	27
Coal	Gas	50	31	Combined organ and pi- ano.	Music	22	5
Coal and oil	do	40	31	Combined punching and shearing.	Metal Punching and Shear- ing.	102	14
Coal and water	do	38	31				
Coal-breakers	Mills	56	25				
Coal, oil, and water	Gas	128	31				
Coal-oil—							
Processes	Mineral Oils	11	31				
Retorts	do	14	31				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Combined rakes and tedders.	Harvesters	79	7	Conplers.	Music	75	5
Combined scrubbers and mops.	Brushing and Scrubbing	29	27	Coupling-bars	Velocipedes	12	7
Combining	Carding	48	21	Couplings	Plows	68	1
Combining, circle combs	do	50	21	Couplings and tow-lines	Ships	32	22
Combs	Toilet	136	24	Conplings—			
Combs and brushes	Electricity. Medical and Surgical	22	26	Arrowhead and jaws	Railway Draft Appliances	357	34
Comb-teeth, cutting	Woodworking-Machines	15	29	Balls	do	337	34
Compasses	Optics	110	30	Beveled link and fixed catch.	do	46	34
Compensating journals	Journal-Boxes, Pulleys, and Shafting.	40	12	Beveled link and swing catch.	do	120	34
Compensators	Railways	6	4	Combined—			
Compensators—				Air-brake	do	32	34
Intermittent grip	do	18	4	Draw-bar and book, with link.	do	12	34
Slot	do	8	4	Headed link and V-slot	do	100	34
Weight	do	16	4	Hook and catch	do	372	34
Composing-sticks	Printing.	47	17	Hook and link	do	452	34
Composite walls	Masonry	13	4	Hook and link—			
Composition	Artificial Stone, Lime, and Cement.	460	15	Combined	do	124	34
Composition	Composite Roofings and Coverings.	274	15	Janney type—			
Compositions	Caoutchouc and Minor Plastics.	155	15	Emergency-releases	do	13	34
Compositions	Fertilizers	125	6	Gravity-locks	do	28	34
Compositions—	Mineral Oils.	32	31	Horizontal sliding latches.	do	43	34
Burning fluid	do	45	31	Knuckle-openers	do	45	34
Compound	Pumps	175	9	Knuckleopeners and locks combined.	do	64	34
Compound	Steam-Engines	195	18	Pivoted—			
Compound—				Horizontal latches	do	51	34
Locomotive	do	80	18	Vertical latches	do	98	34
Lumber	Carpentry	43	29	Safety-brackets	do	14	34
Metal-working machines.	Tools and Implements Making	68	13	Vertical sliding pins	do	179	34
Compounds—				Link-lifters	do	426	34
Fire-extinguishing	Chemicals	33	6	Link, star-wheel detent	do	15	34
Food	Preserving	206	6	Miller hook	do	176	34
Insulating	Caoutchouc and Minor Plastics.	153	15	Pins and links	do	237	34
Pyrotechnic	Explosives	14	6	Pin-supports—			
Cop-tubes	Spinning	19	21	Balls	do	113	34
Copy-holders	Stationery	144	5	Gravity	do	573	34
Cord and rope machines	Cordage	242	21	Spring	do	455	34
Cords and ropes	do	82	21	Rolling detent	do	82	34
Corking-machines	Packaging and Dispensing Liquids.	39	32	Rotary beads	do	133	34
Corn-coverers	Plows	28	1	Sliding detent	do	274	34
Corn-cribs	Thrashing	9	25	Swing pins	do	488	34
Corner-fastenings	Beds	258	8	Tools	do	34	34
Corner-shields	Carpentry	7	29	Train	do	16	34
Cornets and trumpets	Music	73	5	Twin-jaws	do	349	34
Corn-harvesters—				Uncoupling-levers	do	394	34
Implement	Harvesters	22	7	Covering	Wire-Working	3	14
Stalk-cutters	do	115	7	Covering—			
Stalk-cutters—				Cord	Cordage	92	21
Droppers—				Yarn	Carding	25	21
Crane	do	30	7	Yarn	Spinning	14	21
Direct-tilting	do	171	7	Covers	Bookbinding	59	5
Ejector	do	38	7	Covers	Furniture	5	8
Endless apron	do	31	7	Covers	Umbrellas and Canes	73	24
Horizontally moving and tilting.	do	45	7	Cow-milkers	Dairy	91	2
Sliding bottom	do	21	7	Cradles	Beds	181	8
Strippers	do	43	7	Cradles—			
Strippers—				Motor-operated	do	50	8
Comb	do	27	7	Scythes and	Harvesters	167	7
Knife	do	24	7	Cranes and derricks	Cranes and Derricks	23	12
Roller	do	78	7	Cranes and derricks—			
Corn-husking—				Motor-operated	do	39	12
Implement	Thrashing	114	25	Motor-operated—			
Machines	do	179	25	Vertically-adjustable jib.	do	26	12
Corn-planters	Seeders and Planters	1770	1	Rectilinearly-movable load-support.	do	37	12
Corn-poppers	Stoves and Furnaces	58	19	Rectilinearly-movable load-support—			
Corn-shellers—				Electric	do	7	12
Breast and cylinder	Thrashing	204	25	Hydraulic	do	10	12
Disk-action	do	175	25	Load-lifting devices	do	19	12
Ear-grasping	do	122	25	Longitudinal shaft driver.	do	7	12
Implement	do	64	25	Stationary motor	do	28	12
Peripheral action	do	22	25	Traveling motor	do	12	12
Corn-shockers	Harvesters	21	7	Rotary load-support	do	134	12
Corse-coolers	Refrigeration	89	28	Rotary load-support—			
Corrugating	Metal-Bending	105	14	Vertically-adjustable jib.	do	105	12
Corset-fastenings	Clasps, Buckles, and Buttons.	300	11	Rotary rectilinearly-movable load-support.	do	45	12
Corsets	Crinoline and Corsets	542	24	Stationary load-support.	do	54	12
Cotton-choppers	Plows	417	1	Stationary load-support—			
Cotton-harvesters	Harvesters	233	7	Jib	do	50	12
Cotton-planters	Seeders and Planters	354	1	Crank-clutches	Velocipedes	5	7
Cotton-scrapers	Plows	185	1	Compound tools	Kitchen and Table Articles	53	8
Counterbalances	Railway Rolling-Stock	4	34	Compound tools—			
(See Wheels.)				Gripping	do	24	8
Counterpoise-carriages	Ordnance	31	22	Compressed-air water-elevators.	Pumps	123	9
Counters	Store-Furniture	14	8				
Counters—							
Attachments	do	14	8				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Compressing	Metal-Forging	14	13	Crushers and graters—	Vegetable Cutters and Crushers.	83	25
Concrete	Paving	300	15	Reciprocating	do	155	25
Condensers	Driers	16	28	Rotary	Artificial Limbs	54	20
Condensers	Telegraphy	11	16	Crutches	Educational Appliances	24	31
Condensers—				Cryptography	Sugar and Salt	49	6
Injector	Steam-Engines	140	18	Cube sugar	Clasps, Buckles, and Buttons	300	11
Surface	do	305	18	Cuff-holders	Kitchen and Table Articles	82	8
Conduit-holders	Kitchen and Table Articles	122	8	Culinary	Tools and Implements.	20	13
Conduit-holders—				Cultivator-irous	Making		
Pulverizing	do	45	8	Cultivator-teeth	Plows	335	1
Conductors	Electricity. Conductors	489	26	Cultivators	do	1094	1
Conductors—				Cultivators—			
Anti-inductive	Telephony	70	16	Hand	do	47	1
Conductor-supports	Roofing	32	29	Hand—			
Conductor supports and	Electricity. Electric Rail-	200	26	Wheel	do	163	1
insulators.	ways.			Parallel	do	187	1
Conduit-slot	Railway-Brakes	17	34	Revolving	do	38	1
Confectionery	Sugar and Salt	100	6	Rolling	do	65	1
Confectionery machines	Bread, Cracker, and Luzeuge	157	15	Rotary	do	182	1
	Making.			Rotary—			
Conformators	Measuring-Instruments	42	23	Horizontal	do	29	1
Connectors	Electricity. Conductors	304	26	Straddle-row	do	257	1
Construction	Sewerage	26	9	Wheel	do	249	1
Construction—				Wheel—			
Miscellaneous	Masonry	41	4	Straddle-row	do	1480	1
Converters	Metallurgy	56	3	Cupolas	Metallurgy	50	3
Converters—				Cupolas—			
Fixed	do	15	3	Drop-bottoms	do	5	3
Furnace	do	7	3	Fore-hearths	do	51	3
Runway	do	4	3	Water-jackets	do	21	3
Sectional	do	7	3	Wind- chests and tny-	do	44	3
Tuyeres and bottoms	do	21	3	eres.			
Conveyers	Conveyers	84	12	Cups	Kitchen and Table Articles	43	8
Conveyers—				Cups—			
Endless	do	140	12	Collapsible	do	10	8
Endless—				On belt	Seeders and Planters	26	1
Adjustable-leg	do	94	12	On disk	do	72	1
Belt	do	31	12	Sponge	Stationery	110	5
Bolt	do	14	12	Curing, tobacco	Tobacco	61	2
Buckets	do	152	12	Curling bat-brinus	Apparel	110	24
Buckets—				Currycombs	Care of Live Stock	283	2
With traction-roll-	do	46	12	Currying	Hides, Skins, and Leather	31	31
ers.				Curtain—			
Flights	do	46	12	Holders	Curtains, Shades, and Screens	25	8
Hooks	do	16	12	Poles	do	43	8
Pneumatic	do	119	12	Poles and rings	do	35	8
Pneumatic—				Pole-supports	do	56	8
Stackers	do	29	12	Rings and pins	do	71	8
Reciprocating	do	8	12	Curtain-cord			
Retransfer and weigh-	do	23	12	Holders	do	11	8
ing.				Tighteners	do	134	8
Screw	do	70	12	Curtains	Railway Rolling Stock	9	34
Store-horse	do	30	12	(See Cars, sleeping.)			
Thrasher attachments	do	75	12	Curve-scribers	Drafting	22	23
Thrasher attachments—				Curving plates	Metal-Bending	32	14
Foldable	do	17	12	Cutlery-making	Hardware-Making	89	13
Laterally and verti-	do	91	12	Cut-nail making	Nails and Spikes	158	13
cally adjustable.				Cut-off	Steam-Engine Valves	312	18
Oscillatory	do	39	12	Cut-offs	Fluid-Pressure Regulators	69	31
Vertically-adjustable.	do	25	12	Cut offs—			
Trimmmers	do	18	12	Automatic	Lamps and Gas-Fittings	87	30
Coping	Masonry	11	4	Pressure	do	41	30
Crank-paddles	Marine Propulsion	58	22	Cut-offs and spouts	Water-Distribution	184	9
Cranks and levers	Machine Elements	375	12	Cut-outs—			
Cranks and levers—				Electromagnetic	Electric Lighting	147	16
Handles	do	41	12	Hanger	do	32	16
Crates	Packing and Storing Vessels	66	32	Mechanical	do	77	16
(See Wooden boxes,				Mechanical—			
crates.)				Oscillating—			
Crates. Baskets and	do	45	32	Snap	do	103	16
(See Metallic vessels,				Spring	do	33	16
baskets and crates.)				Rotary	do	84	16
Crayon-holders	Stationery	260	5	Sliding	do	49	16
Crayon-machines	Caoutchouc and Minor Plas-	51	15	Thermal	do	113	16
	tics.			Thermal—			
Cream-pumps	Dairy	4	2	Branch	do	22	16
Cribbing	Hydraulic Engineering	13	4	Lamp	do	44	16
Cribs	Beds	51	8	Plug	do	14	16
Cribs—				Successive	do	39	16
Attachments	do	35	8	Cutters	Glass	81	15
Crimping	Boots and Shoes	280	11	Cutters	Paper-Manufactures	27	17
Crimping and curling	Toilet	186	24	Cutters	Woodworking-Machines	91	29
Crocheting	Knitting and Netting	8	21	Cutters—			
Croquet	Games and Toys	35	7	Bread	Vegetable Cutters and Crush-	85	25
Crossing signals, auto-	Railways	59	4		ers.		
matic				Chain	Woodworking-Machines	13	29
Crossings	do	89	4	Reciprocating	Paper-Manufactures	236	17
Crossings—				Reciprocating	Vegetable Cutters and Crush-	224	25
Movable-rail	do	32	4	Rotary	ers.		
Movable-rail—				Rotary	Paper-Manufactures	248	17
Stub	do	14	4	Rotary—	Vegetable Cutters and Crush-	221	25
Cross-weaving	Weaving	29	21	Slitters and winders	Paper-Manufactures	28	17
Cross-weld	Metal-Tube Manufacture	23	13				
Crozing barrels	Coopering	73	29				
Crozing staves	do	49	29				
Crucibles	Metallurgy	30	3				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Cutters—				Derailers and replacers..	Railway Rolling-Stock.....	8	34
Rotary—				Derailing-switches.....	Railways.....	12	4
Stocks.....	Woodworking-Machines....	369	29	Derailment-guards.....	Railway Rolling-Stock.....	30	34
Transverse.....	Paper-Manufactures.....	47	17	Derailment-guards—			
Traveling.....	do.....	37	17	Inclined wheels.....	do.....	13	34
Sod.....	Plows.....	45	1	Rail-interlocking.....	do.....	14	34
Traveling.....	Paper-Manufactures.....	29	17	Supplemental wheels.....	do.....	14	34
Cutters and cutter-hold- ers.....	Metal Turning, Planing, and Milling.....	180	13	Derricks, Cranes and.....	Cranes and Derricks.....	23	12
Cutting.....	Apparel.....	244	24	Desk-rulers.....	Stationery.....	125	5
Cutting.....	Leather-Working Machin- ery.....	430	11	Desks.....	Furniture.....	57	8
Cutting.....	Metal Punching and Shear- ing.....	190	14	Desks—			
Cutting and straightening	Wire-Working.....	50	14	Attachments.....	do.....	6	8
Cutting apparatus—				Lids.....	do.....	50	8
Endless.....	Harvesters.....	59	7	Flexible.....	do.....	10	8
Guard-fingers and fin- ger-bars.....	do.....	194	7	Portable.....	do.....	27	8
Reciprocating.....	do.....	342	7	Sectional.....	do.....	33	8
Rotary.....	do.....	42	7	Table.....	do.....	43	8
Vibrating.....	do.....	37	7	Desiccation.....	Preserving.....	165	6
Cutting double pile fab- rics.....	Weaving.....	23	21	Detaching, hoisting, and lowering.....	Boats.....	233	22
Cutting dye-wood.....	Woodworking-Machines....	18	29	Details.....	Telephony.....	91	16
Cutting gears.....	do.....	5	29	Detector-bars.....	Railways.....	13	4
Cutting lace and looped fabrics.....	Cloth-Finishing.....	20	21	Detergents.....	Oils, Fats, and Glue.....	405	31
Cutting printers' leads.....	Sheet-Metal Ware. Making.....	44	14	Detonating-signals.....	Railways.....	95	4
Cutting sharpeners.....	Metal-Working Tools.....	118	14	Devices, Key-holding.....	Music.....	9	5
Cylinder—				Dial.....	Telegraphy.....	29	16
External.....	Driers.....	53	28	Dials and hands.....	Horology.....	96	23
Internal—				Diamond-tools.....	Stone-Working.....	52	25
Rotary horizontal.....	do.....	391	28	Diapers.....	Apparel.....	17	24
Rotary inclined.....	do.....	84	28	Diaphragm.....	Fluid-Pressure Regulators.....	223	31
Stationary horizontal.....	do.....	88	22	Diaphragm.....	Pumps.....	59	9
Stationary inclined.....	do.....	2	28	Diaphragm-lever.....	Fluid-Pressure Regulators.....	112	31
Vertical.....	do.....	5	28	Dice-boxes.....	Games and Toys.....	31	7
Cylinder machines, Bed and.....	Printing.....	109	17	Dice-throwers.....	Coin-Controlled Apparatus.....	22	14
Cylinder relief-valves.....	Steam-Engines.....	111	18	Dicycles.....	Velocipedes.....	33	7
Cylinders and rollers.....	Carding.....	51	21	Dies.....	Matrix-Making.....	17	30
Cylinders for self-playing instruments.....	Music.....	84	5	Dies.....	Tools and Implements.....	29	13
Cylindrical.....	Metal-Rolling.....	100	13	Diffusion apparatus.....	Making.....		
Daguerreotypy.....	Photography.....	32	6	Digesters.....	Sugar and Salt.....	51	6
Dampers.....	Stoves and Furnaces.....	440	19	Diggers.....	Paper-Making.....	202	15
Dampers—				Dining-cars.....	Excavating.....	32	4
Automatic.....	do.....	58	19	(See Cars, dining.)	Railway Rolling-Stock.....	5	34
Automatic—				Dipping-tanks.....	Painting.....	48	31
Balanced-motor.....	do.....	27	19	Dip-pipes.....	Gas.....	65	31
Draft-operated.....	do.....	33	19	Disabling.....	Ordnance.....	4	22
Electrical.....	do.....	72	19	Dish-cleaners.....	Washing Apparatus.....	112	27
Expansion.....	do.....	125	19	Dish-cloth holders.....	do.....	20	27
Fluid-pressure.....	do.....	196	19	Dish-covers.....	Kitchen and Table Articles.....	14	8
Positive-connection.....	do.....	18	19	Dish-drainers.....	Washing Apparatus.....	52	27
Pressure-motor.....	do.....	88	19	Dishes and plates.....	Kitchen and Table Articles.....	49	8
Harmonic.....	Music.....	7	5	Dishes and plates—			
Harmonic—				Covered.....	do.....	59	8
Violin.....	do.....	9	5	Pivoted covers.....	do.....	32	8
Dampers and mutes, vio- lin.....	do.....	33	5	Dishing plates.....	Metal-Bending.....	12	14
Dampers for piano-ac- tions.....	do.....	16	5	Dish-stands.....	Kitchen and Table Articles.....	12	8
Dams and levees.....	Hydraulic Engineering.....	45	4	Disinfectants.....	Medicines.....	216	6
Dams and levees—				Disintegrating fibrous substances.....	Paper-Making.....	65	15
Cores.....	do.....	13	4	Disk and hopper.....	Driers.....	9	28
Mattresses.....	do.....	11	4	Disk on axle.....			
Dams—				Brake-band.....	Railway-Brakes.....	19	34
Coffer.....	do.....	31	4	Peripheral shoes.....	do.....	22	34
Sectional.....	do.....	11	4	Side shoes.....	do.....	10	34
Dark-rooms.....	Photography.....	21	6	Disks and holders.....	Dentistry.....	29	20
Darning.....	Knitting and Netting.....	7	21	Dispensing fountains.....	Packaging and Dispensing Liquids.....	73	32
Darning-lasts.....	Apparel.....	27	24	Dispensing-fountains—			
Dashboards.....	Carriages and Wagons.....	113	10	Cans—			
Deadening noise.....	Railways.....	37	4	Horizontal.....	do.....	12	32
Decarbolizing.....	Annealing and Tempering.....	43	3	Vertical.....	do.....	51	32
Decks and batches.....	Ships.....	15	22	Draft apparatus.....	do.....	57	32
Decomposing fats.....	Oils, Fats, and Glue.....	100	31	Draft apparatus—			
Decorative lights.....	Lamps and Gas-Fittings.....	18	30	Pressure-reducers.....	do.....	16	32
Decorative painting.....	Fine Arts.....	3	5	Liquid-holders.....	do.....	33	32
Decoys.....	Fishing and Trapping.....	28	22	Portable.....	do.....	21	32
Defecating.....	Sugar and Salt.....	35	6	Portable—			
Deflection-stands.....	Railways.....	10	4	Bottle-taps.....	do.....	24	32
Delinting cotton-seed.....	Brakes and Gins.....	59	21	Siphons.....	do.....	44	32
Deliveries.....	Printing.....	50	17	Pump.....	do.....	17	32
Deliveries—				Display-box covers.....	Advertising.....	35	32
Associators.....	do.....	11	17	Display-boxes.....	do.....	125	32
Droppers.....	do.....	67	17	Sample-holders.....	do.....	105	32
Fly-frames.....	do.....	19	17	Display-cards.....	do.....	110	32
Gripper-fliers.....	do.....	33	17	Display-forms.....	Store-Furniture.....	102	8
Receiving-tables.....	do.....	35	17	Display-racks.....	do.....	147	8
Demagnetizing.....	Electricity. Special Appli- cations.....	10	16	Display-racks—			
Dental instruments.....	Electricity. Motive-Power.....	48	26	Adjustable-arm.....	do.....	49	8
Depilating.....	Hides, Skins, and Leather.....	26	31	Enclosed.....	do.....	85	8
Depurators.....	Surgery.....	37	6	Hanging.....	do.....	73	8
				Roll.....	do.....	110	8
				Rope.....	do.....	18	8
				Rotary.....	do.....	99	8
				Rotary—			
				Enclosed.....	do.....	40	8

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Display-racks—				Double-piston.....	Pumps.....	191	9
Sample-sheet.....	Store-Furniture.....	28	8	Doubling.....	Silk.....	5	21
Sample-sheet—				Doubling.....	Spinning.....	48	21
Rotary.....do.....	.....do.....	26	8	Dough-raisers.....	Stoves and Furnaces.....	46	19
Display-stands.....	Advertising.....	75	8	Dovetailing.....	Woodworking-Machines.....	59	29
Display-trays.....	Optics.....	55	32	Draft—			
Distance-instruments.....	Alcohol.....	63	30	Cable.....	Railway Draft Appliances.....	13	34
Distilled spirits.....		11	31	Equalizers.....	Carriages and Wagons.....	511	10
Distilled spirits—				Regulators, steam-in-	Stoves and Furnaces.....	28	19
Aging apparatus.....	.....do.....	81	31	jected.			
Aging apparatus—				Drag—			
Rocking racks.....	.....do.....	14	31	Crank.....	Wood-Sawing.....	287	29
Aging processes.....	.....do.....	24	31	Lever.....	.....do.....	236	29
Apparatus.....	.....do.....	32	31	Drainage.....	Pumps.....	7	9
Apparatus—				Drains.....	Hydraulic Engineering.....	26	4
Stills.....	.....do.....	65	31	Drain-tiles.....	Clay and Pottery.....	86	15
Stills—				Draw-bars.....	Railway Draft Appliances.....	254	34
Columns.....	.....do.....	93	31	Draw-bars—			
Doublers and	.....do.....	84	31	Continuous.....	.....do.....	40	34
worms.				Street-car.....	.....do.....	40	34
Vapor-filters.....	.....do.....	26	31	Drawbridges.....	Bridges.....	25	4
Rectifying processes.....	.....do.....	42	31	Drawer-plates.....	Advertising.....	30	32
Distributors.....	Lamps and Gas-Fittings.....	14	30	Drawers.....	Furniture.....	42	8
Distribution.....	Gas.....	29	31	Drawers—			
Distribution—				Guides.....	.....do.....	84	8
Leakage.....	.....do.....	51	31	Locking devices.....	.....do.....	47	8
Preventing leakage.....	.....do.....	14	31	Swinging.....	.....do.....	10	8
Regulating pressure.....	.....do.....	21	31	Tilting.....	.....do.....	10	8
Separators.....	.....do.....	11	31	Draw-gates, bridges.....	Bridges.....	197	4
Ditching-plows.....	Plows.....	157	1	Drawing and evening.....	Spinning.....	100	21
Dividing-engines.....	Measuring-Instruments.....	46	23	Drawing—			
Diving-armor.....	Hydraulic Engineering.....	44	4	Boards.....	Fine Arts.....	92	5
Docks.....	.....do.....	32	4	Rollers.....	Spinning.....	62	21
Domestic.....	Spinning.....	79	21	Stop mechanism.....	.....do.....	68	21
Door and turnstile locks.....	Coin-Controlled Apparatus.....	9	14	Trumpets.....	.....do.....	8	21
Door-bells.....	Carpentry.....	57	29	Draw-plates.....	Metal-Drawing.....	26	13
Door-checks.....	Signals.....	192	22	Drays.....	Carriages and Wagons.....	36	10
Door-checks—	Builders' Hardware.....	54	20	Dredgers—			
Buffers.....	.....do.....	29	20	Anchoring.....	Excavating.....	20	4
Catches.....				Clam-shell.....	.....do.....	33	4
Floor.....	.....do.....	35	20	Clam-shell—			
Wall.....	.....do.....	128	20	Buckets.....	.....do.....	136	4
Catches and buffers.....	.....do.....	10	20	Scouring.....	.....do.....	69	4
Chain or link.....	.....do.....	64	30	Scouring—			
Foot-bolt.....	.....do.....	47	20	Hydraulic.....	.....do.....	30	4
Foot-lever.....	.....do.....	42	20	Dress and mud guards.....	Velocipedes.....	22	7
Sliding bolt.....	.....do.....	21	20	Dress attachments.....	Trees, Plants, and Flowers.....	45	1
Trippers.....	.....do.....	15	20	Dressing and assorting	Brushing and Scrubbing.....	44	27
Weights.....	.....do.....	5	20	machines.			
Door checks and closers.....	.....do.....	8	20	Dressing, casing, and fla-	Tobacco.....	74	2
Door checks and closers—				voring tobacco.			
Liquid.....	.....do.....	32	20	Dressing slate.....	Stone-Working.....	41	25
Pneumatic.....	.....do.....	87	20	Dressing stone.....	.....do.....	297	25
Door-closers, gravitat-	.....do.....	41	20	Driers.....	Painting.....	22	31
ing.				Drill-chucks.....	Metal Boring and Drilling.....	198	13
Door-hangers.....	.....do.....	130	20	Drilling and boring.....	Artesian and Oil Wells.....	401	25
Door-hangers—				Drilling-machines.....	Metal Boring and Drilling.....	322	13
Brackets.....	.....do.....	6	20	Drill-jars.....	Artesian and Oil Wells.....	33	25
Roller-carriage.....	.....do.....	133	20	Drill-rod grabs.....	.....do.....	51	25
Roller-carriage—				Drills.....	Stone-Working.....	517	25
Ball-bearing.....	.....do.....	27	20	Drills.	Tools and Implements.	103	13
Sliding.....	.....do.....	2	20	Drills—	Making.....		
Stay-rollers.....	.....do.....	23	20	Adjustable-rank.....	Seeders and Planters.....	62	1
Door-openers—				Drills and broadcast	.....do.....	11	1
Cab.....	Fences.....	14	1	combined.			
Car.....	.....do.....	364	1	Elastic feed-wheels.....	.....do.....	17	1
Car-platform.....	.....do.....	39	1	Grain.....	.....do.....	364	1
Sliding.....	.....do.....	15	1	Hand.....	Metal Boring and Drilling.....	52	13
Swinging.....	.....do.....	35	1	Ratchet.....	.....do.....	164	13
Doors.....	Carpentry.....	110	29	Rock.....	Steam-Engines.....	309	18
Doors.....	Iron Structures.....	17	4	Walking.....	Seeders and Planters.....	78	1
Doors.....	Steam-Boiler Furnaces.....	107	18	Drill-teeth.....	.....do.....	187	1
Doors and windows.....	Carriages and Wagons.....	43	10	Drink-mixers.....	Dairy.....	72	2
Doors—				Drip—			
Car.....	Carpentry.....	161	29	Catchers.....	Lamp and Gas-Fittings.....	7	30
Car—				Cups.....	Umbrellas and Canes.....	31	24
Grain.....	.....do.....	176	29	Troughs.....	Carpentry.....	16	29
Door-securers.....	Builders' Hardware.....	126	20	Driving and lay motions.	Weaving.....	17	21
Door-securers—				Drop-hammers.....	Metal-Forging.....	96	13
Braces.....	.....do.....	23	20	Drop-lights—			
Door-springs.....	.....do.....	24	20	Burner attachments.....	Lamps and Gas-Fittings.....	32	30
Door-springs—				Counterweight.....	.....do.....	76	30
Bow.....	.....do.....	19	20	Friction and clutch.....	.....do.....	187	30
India-rubber.....	.....do.....	18	20	Spring-drum.....	.....do.....	137	30
Lever attachments.....	.....do.....	138	20	Droppers—			
Sliding-door.....	.....do.....	4	20	Direct-tilting.....	Harvesters.....	77	7
Strap and pulley attach-	.....do.....	30	20	Miscellaneous.....	.....do.....	8	7
ments.				Opening and closing.....	.....do.....	49	7
Torsional.....	.....do.....	34	20	Side-delivery.....	.....do.....	93	7
Torsional—				Swinging and tilting.....	.....do.....	28	7
Coiled.....	.....do.....	27	20	Drums.....	Music.....	55	5
Flat.....	.....do.....	29	20	Dry closets.....	Baths and Closets.....	408	9
Voile.....	.....do.....	9	20	Dumb-bells and clubs.....	Surgery.....	28	6
Doors, sliding.....	Carpentry.....	159	29	Dumb-waiters.....	Elevators.....	55	12
Double-acting.....	Pumps.....	308	9	Dumping-cars.....	Railway Rolling-Stock.....	63	34
Double-cylinder.....	.....do.....	331	9	(See Cars, dumping.)			

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Dumping-wagons . . . . .	Carriages and Wagons . . . . .	432	10	Electrolysis—			
Duplex . . . . .	Telegraphy . . . . .	117	16	Bleaching . . . . .	Electro-Chemistry . . . . .	9	3
Dust-collectors—				Diaphragms . . . . .	do . . . . .	3	3
Reciprocating . . . . .	Mills . . . . .	69	25	Fused bath . . . . .	do . . . . .	22	3
Rotating . . . . .	do . . . . .	175	25	Fused bath—			
Dust-guards . . . . .	Railway Rolling-Stock . . . . .	5	34	Aluminium . . . . .	do . . . . .	28	3
(See Cars, passenger.)				Sodium . . . . .	do . . . . .	5	3
Dust-pans . . . . .	Kitchen and Table Articles . . . . .	109	8	Purifying liquids . . . . .	do . . . . .	4	3
Dust-pans—				Purifying liquids—			
Brush attachments . . . . .	do . . . . .	25	8	Alcohol . . . . .	do . . . . .	18	3
Foot-pieces . . . . .	do . . . . .	18	8	Water . . . . .	do . . . . .	66	3
Dust-trunks . . . . .	Carding . . . . .	19	21	Tanning . . . . .	do . . . . .	7	3
Dyeing processes . . . . .	Bleaching and Dyeing . . . . .	116	6	Electromagnets . . . . .	Electricity. Special Appli- cations . . . . .	110	16
Dyes . . . . .	do . . . . .	100	6				
Dyes—				Electropneumatic—			
Carbon . . . . .	do . . . . .	676	6	Organ-actions . . . . .	Music . . . . .	6	5
Dynamometers . . . . .	Measuring-Instruments . . . . .	128	23	Self-playing instru- ments . . . . .	do . . . . .	7	5
Dynamos . . . . .	Telegraphy . . . . .	27	16	Electrotyping . . . . .	Printing . . . . .	34	17
Ear . . . . .	Surgery . . . . .	34	6	Elevated . . . . .	Railways . . . . .	109	4
Ear-rings . . . . .	Jewelry . . . . .	109	5	Elevated—			
Ear-trumpets . . . . .	Acoustics . . . . .	39	23	Bicycle . . . . .	do . . . . .	10	4
Earth-angers . . . . .	Artesian and Oil Wells . . . . .	124	25	Cable-rail . . . . .	do . . . . .	39	4
Earth-angers—				Elevated carriers . . . . .	Hoisting . . . . .	116	12
Bits . . . . .	do . . . . .	277	25	Elevated carriers—			
With carriers . . . . .	do . . . . .	12	25	Draft-sustaining . . . . .	do . . . . .	78	12
Easels . . . . .	Fine Arts . . . . .	121	5	Lever-lock . . . . .	do . . . . .	18	12
Eaves-troughs . . . . .	Roofing . . . . .	229	29	Non-lowering support . . . . .	do . . . . .	25	12
Eaves-troughs—				Ratchet-lock . . . . .	do . . . . .	27	12
Strainers . . . . .	do . . . . .	16	29	Rope-catch . . . . .	do . . . . .	121	12
Edge-planes and shaves . . . . .	Boots and Shoes . . . . .	130	11	Sheave-frame catch . . . . .	do . . . . .	150	12
Edgers . . . . .	Wood-Sawing . . . . .	128	29	Ways . . . . .	do . . . . .	47	12
Edging sheets . . . . .	Sheet-Metal Ware. Making . . . . .	138	14	Elevator . . . . .	Driers . . . . .	78	28
Egg-beaters . . . . .	Dairy . . . . .	16	2	Elevators . . . . .	Electricity. Motive-Power . . . . .	109	26
Egg-beaters—				Elevators . . . . .	Elevators . . . . .	196	12
Reciprocating . . . . .	do . . . . .	39	2	Elevators—			
Rotary—				Adjustable balances . . . . .	do . . . . .	7	12
Multiple-dasher . . . . .	do . . . . .	63	2	Automatic stops . . . . .	do . . . . .	26	12
Single-dasher . . . . .	do . . . . .	71	2	Chairs . . . . .	do . . . . .	5	12
Vibrating . . . . .	do . . . . .	45	2	Combined locks and au- tomatic stops . . . . .	do . . . . .	12	12
Egg-cups . . . . .	Kitchen and Table Articles . . . . .	37	8	Controllers . . . . .	do . . . . .	113	12
Egg-testers . . . . .	Preserving . . . . .	58	6	Controllers—			
Electric . . . . .	Railway-Brakes . . . . .	68	31	Running-rope . . . . .	do . . . . .	28	12
Electric actions . . . . .	Music . . . . .	35	5	Counterweights . . . . .	do . . . . .	12	12
Electrical . . . . .	Type-Writing Machines . . . . .	26	30	Guides . . . . .	do . . . . .	7	12
Electrical appliances . . . . .	Firearms . . . . .	11	22	Hod . . . . .	do . . . . .	80	12
Electrical appliances . . . . .	Ordnance . . . . .	19	22	Indicators . . . . .	do . . . . .	40	12
Electric locomotives . . . . .	Electricity. Electric Rail- ways . . . . .	50	26	Lazy-tongs . . . . .	do . . . . .	17	12
Electric locomotives . . . . .	Railway Rolling-Stock . . . . .		34	Locks . . . . .	do . . . . .	10	12
(See Locomotives, elec- tric.)				Mail . . . . .	do . . . . .	17	12
Electric locomotives—				Safety devices . . . . .	do . . . . .	26	12
Electric control . . . . .	Electricity. Electric Rail- ways . . . . .	36	26	Safety devices—			
Electromechanical con- trol . . . . .	do . . . . .	31	26	Door-locked control- lers . . . . .	do . . . . .	28	12
Motor on axle . . . . .	do . . . . .	64	26	Overwinding . . . . .	do . . . . .	8	12
Pivoted motors . . . . .	do . . . . .	52	26	Shaft-guide catches and grips . . . . .	do . . . . .	309	12
Single and multiple mo- tor . . . . .	do . . . . .	19	26	Speed-governors . . . . .	do . . . . .	18	12
Spring-mounted motors . . . . .	do . . . . .	27	26	Speed-governors—			
Traveling-dynamo . . . . .	do . . . . .	8	26	Fluid-retarders . . . . .	do . . . . .	38	12
Electric—				Well-bottom cushions . . . . .	do . . . . .	13	12
Magnetic clutch, wind- ing-drum . . . . .	Railway-Brakes . . . . .	17	34	Well obstruction . . . . .	do . . . . .	24	12
Magnetic shoes . . . . .	do . . . . .	16	34	Screw . . . . .	do . . . . .	41	12
Motor . . . . .	Railway Rolling-Stock . . . . .		34	Screw and traveling sheave or block . . . . .	do . . . . .	16	12
(See Trucks and loco- motives.)				Slack-cable stops . . . . .	do . . . . .	32	12
Solenoid-operated . . . . .	Railway-Brakes . . . . .	12	34	Well-doors—			
Soles . . . . .	Electricity. Medical and Surgical . . . . .	18	26	Horizontal—			
Toys . . . . .	Games and Toys . . . . .	19	7	Horizontal hinge . . . . .	do . . . . .	155	12
Electrodes . . . . .	Electricity. Medical and Surgical . . . . .	52	26	Horizontally-slid- able . . . . .	do . . . . .	38	12
Electrolysis—				Vertical hinge . . . . .	do . . . . .	4	12
Aqueous bath . . . . .	Electro-Chemistry . . . . .	34	3	Vertically-slidable . . . . .	do . . . . .	29	12
Aqueous bath—				Vertical—			
Alloys . . . . .	do . . . . .	15	3	Horizontal hinge . . . . .	do . . . . .	49	12
Aluminium . . . . .	do . . . . .	6	3	Horizontally-slid- able . . . . .	do . . . . .	65	12
Anodes . . . . .	do . . . . .	18	3	Vertical hinge . . . . .	do . . . . .	6	12
Apparatus . . . . .	do . . . . .	84	3	Vertically-slidable . . . . .	do . . . . .	115	12
Cathodes . . . . .	do . . . . .	14	3	Elevators and drops . . . . .	Store-Service . . . . .	57	12
Cathodes—				Ellipsographs . . . . .	Drafting . . . . .	50	23
Cleaning . . . . .	do . . . . .	3	3	Embalming . . . . .	Undertaking . . . . .	11	20
Metallizing . . . . .	do . . . . .	42	3	Embalming—			
Chemicals . . . . .	do . . . . .	68	3	Apparatus . . . . .	do . . . . .	14	20
Copper . . . . .	do . . . . .	8	3	Processes . . . . .	do . . . . .	8	20
Depolarizing and burnishing . . . . .	do . . . . .	35	3	Embossing . . . . .	Photography . . . . .	11	6
Gold . . . . .	do . . . . .	3	3	Embroidering . . . . .	Sewing-Machines . . . . .	237	24
Multiple . . . . .	do . . . . .	22	3	Embroidery-cases . . . . .	Advertising . . . . .	30	32
Nickel . . . . .	do . . . . .	29	3	Embroidery-patterns . . . . .	Apparel . . . . .	35	24
Ores . . . . .	do . . . . .	57	3	Enameling . . . . .	Glass . . . . .	99	15
Silver . . . . .	do . . . . .	2	3	Enameling wood . . . . .	Painting . . . . .	27	31
Tin . . . . .	do . . . . .	8	3	End gates . . . . .	Carriages and Wagons . . . . .	415	10
Zinc . . . . .	do . . . . .	4	3	Endless belts . . . . .	Hides, Skins, and Leather . . . . .	13	31
				Endless carrier . . . . .	Driers . . . . .	120	25
				Endless scraper . . . . .	do . . . . .	7	28
				Engines . . . . .	Dentistry . . . . .	27	20



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Engines—				Fabrics	Felt and Fur	109	21
Air	Air and Gas Engines	25	28	Fabrics	Knitting and Netting	263	21
Bracket-supports	Dentistry	30	30	Fabrics	Paper-Making	326	15
Caloric	Air and Gas Engines	255	28	Fabrics	Wire-Working	18	14
Compound	Steam-Engines	195	18	Fabrics—			
Explosive	Air and Gas Engines	646	28	Elastic	Weaving	35	21
Friction-gear	Dentistry	15	20	Fabrics	do	192	21
Gas	Air and Gas Engines	99	28	Making	Wire-Working	16	14
Locomotive	Steam-Engines	107	18	Making—			
Oscillating	do	187	18	Coiled	do	19	14
Portable	do	130	18	Twisted	do	48	14
Pumping	do	328	18	Pile	Weaving	85	21
Rotary	do	34	18	Tubular	do	51	21
Single-acting com-	do	103	18	Working	Wire-Working	19	14
pound.				Facing walls	Masonry	65	4
Standard-supports	Dentistry	61	20	False stems	Trees, Plants, and Flowers	4	1
Engraving and tools	Fine Arts	50	5	Fan attachments	Pneumatics	212	28
Engraving-machines	do	262	5	Fans and regulators	Thrashing	44	25
Envelope-machines	Paper-Manufactures	214	17	Fans—			
Envelope-openers	Cutlery	31	13	Automatic	Pneumatics	267	28
Envelopes	Paper-Manufactures	439	17	Toilet	do	113	28
Epicycles	Velocipedes	24	7	Fare-boxes	Packing and Storing Vessels	18	32
Erasers	Stationery	73	5	Fare-boxes—			
Erasers—				Change	do	29	32
Knife	do	49	5	Check-receivers	do	41	32
Evaporating-pans	Sugar and Salt	778	6	Closed slot	do	21	32
Excavators—				Conveyers	do	9	32
Chain and bucket	Excavating	131	4	Detachable locking-re-	do	19	32
Chain and bucket—				ceptacle			
Buckets	do	10	4	Portable	do	11	32
Dippers	do	110	4	Portable closures	do	30	32
Hydraulic	do	127	4	Shelf—			
Hydraulic—				Rotating	do	20	32
Pipe-supports	do	7	4	Serrated	do	10	32
Steam vacuum	do	27	4	Sliding	do	15	32
Suction-pipe mouth-	do	26	4	Tilting	do	18	32
pieces.				Tilting—			
Miscellaneous	do	8	4	Multiple	do	16	32
Plow and carrier	do	211	4	Farm implements	Tools and Implements	13	13
Rammers	do	10	4	Making			
Road beds and grades	do	9	4	Feed mechanism	Woodworking-Machines	31	29
Scoops	do	132	4	Feed mechanism—			
Scoops—				Rolls	do	86	29
Railway-side	do	30	4	Feeders	Steam-Boilers	600	18
Scrapers	do	162	4	Feeding	Knitting and Netting	121	21
Scrapers—				Feeding	Printing	63	17
Distant power	do	56	4	Feeding	Sewing-Machines	382	24
Railway-side	do	9	4	Feeding—			
Sledged	do	34	4	Air	Steam-Boiler Furnaces	517	18
Wheeled	do	226	4	Cards	Carding	128	21
Screw	do	14	4	Fine fuel	Steam-Boiler Furnaces	66	18
Screw and carrier	do	16	4	Fuel	do	185	18
Self-loading carts	do	22	4	Gages	Printing	26	17
Self-loading carts—				Gages—			
Carrier	do	17	4	Front stops	do	26	17
Scoop	do	185	4	Separators	do	69	17
Wheel	do	34	4	Separators—			
Snow-road machines	do	41	4	Buckling	do	34	17
Treating quicksand	do	8	4	Pneumatic	do	37	17
Wheel	do	141	4	Sheet-cutters	do	42	17
Wheel and belt	do	9	4	Steam	Steam-Boiler Furnaces	354	18
Wheel and carrier	do	33	4	Web	Printing	22	17
Exclusion of air	Preserving	246	6	Feeding and tension	Wire-Working	16	14
Exercising devices	Music	10	5	Fellies and rims	Carriages and Wagons	100	10
Exercising devices—				Felt	Composite Roofings and Cov-	77	15
Hand attachments	do	7	5	Felt	erings.		
Keyboard	do	14	5	Felt	Felt and Fur	325	21
Keyboard attachments	do	17	5	Felt	Metal Punching and Shear-	74	14
Vocal	do	4	5	ing.			
Exercising-machines	Electricity. Medical and	14	26	Fence-posts, bases, metal.	Fences	171	1
Exercising-machines	Surgical			Fences—			
Exhaust mechanism	Surgery	309	6	Barbed	do	278	1
Exhausters	Steam-Engines	186	18	Barbed—			
Exhaust, regenerated	Gas	14	31	Linked	do	40	1
Exhibitors—	Steam-Engines	69	18	Ribbon	do	120	1
Movable object	Coin-Controlled Apparatus	28	14	Visible	do	28	1
Surface	do	42	14	Cat-guards	do	20	1
Express	Saves	12	20	Earth and plastic	do	5	1
Express-cars	Railway Rolling-Stock	34		Flood	do	177	1
(See Cars, express.)				Iron	do	228	1
Extension-ladders	Fire Escapes and Ladders	58	4	Wire	do	133	1
Extinguishers—				Wood	do	168	1
Fluid	Lamps and Gas-Fittings	9	30	Wood—			
Mechanical	do	230	30	Panel	do	446	1
Pneumatic	do	22	30	Panel—			
Extracting oils	Oils, Fats, and Glue	190	31	Suspended	do	15	1
Extracts	Medicines	100	6	Worm	do	133	1
Eye	Surgery	33	6	Picket	do	32	1
Eyebolts and hooks	Hardware-Making	96	13	Picket—			
Eyeglasses	Optics	243	30	Panel	do	69	1
Eyetelegraph-machines	Clasps, Buckles, and Buttons	175	11	Tied	do	203	1
Eyetelets	do	100	11	Fenders	Carriages and Wagons	56	10
Eyetelets	Metal Personal Wear. Mak-	54	14	Fenders	Plows	166	1
Fabrics	ing			Fenders	Railway Rolling-Stock	38	34
	Caoutchouc and Minor Plas-	119	15	(See Wheel-fenders.)			
	tics.			Fenders	Roofing	29	29
				Fenders	Stoves and Furnaces	72	19

Sub-class.	Class.	No. of Patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Fenders and torpedo-guards.	Ships	38	22	Fire-guards.	Fences.	23	1
Fermenting apparatus.	Alcohol.	4	31	Fire-kindlers.	Fuel.	171	15
Fermenting apparatus—				Fire-kindlers—			
Vats.	do	41	31	Absorbers.	do	100	15
Vent-bungs.	do	49	31	Automatic.	do	30	15
Fermenting processes.	do	42	31	Fireplaces.	Stoves and Furnaces.	169	19
Ferrules, rings, and thimbles.	Hardware-Making.	87	13	Fireplaces—			
Ferry-guards, bridges.	Bridges.	8	4	Blowers.	do	91	19
Fertilizer-distributors.	Seeders and Planters.	404	1	Fire-backs.	do	50	19
Fertilizer-distributors—				Fronts.	do	42	19
Hand.	do	25	1	Hot-air.	do	159	19
Revolving hoppers.	do	23	1	Fire-pots and linings.	do	160	19
Walking.	do	36	1	Fireproof.	Safes.	78	20
Fibers.	Paper-Making.	65	15	Fireproof—			
Fibrous compositions.	Caoutchouc and Minor Plastics.	72	15	Roofs.	Fireproof Buildings.	22	4
Fifth-wheels.	Carriages and Wagons.	447	10	Shutters.	do	54	4
Fifth-wheels—				Fireproofing compounds.	Painting.	27	31
Making.	Wagon, Car, and Track Irons.	24	13	Fire-shields.	Fireproof Buildings.	53	4
Figure toys.	Games and Toys.	322	7	Fire-tubes.	Steam-Boilers.	314	18
Figure wheeled toys.	do	171	7	Fish-dressing machines.	Butchering.	9	25
Filaments and carbons.	Electric Lighting.	282	16	Fishing—			
File-blanks.	Tools and Implements.	30	13	Fishways.	Fishing and Trapping.	16	22
File-cutting.	do	170	13	Floats.	do	27	22
Files—				Harpoons and spears.	do	15	22
Bill.	Stationery.	166	5	Hooks.	do	230	22
Newspaper.	Bookbinding.	119	5	Nets and seines.	do	116	22
Files and rasps.	Tools and Implements.	89	13	Oyster-culture.	do	9	22
Fillers.	do	45	31	Oyster-dredges.	do	28	22
Filling and corking.	Painting.	39	32	Oyster rakes and tongs.	do	18	22
Internal-stopper.	Packaging and Dispensing Liquids.	39	32	Pisciculture.	do	30	22
Reciprocating-head.	do	17	32	Reels.	do	190	22
Turn-over.	do	17	32	Rnds.	do	122	22
Filling-machines.	do	62	32	Sinkers.	do	28	22
Filling-machines—				Flags, Banners and	Fine Arts.	11	5
Cut-offs—				Flagstaff-holders.	Signals.	37	22
Automatic.	do	19	32	Flanges for piano-actions.	Music.	20	5
Float.	do	43	32	Flanging.	Metal-Bending.	85	14
Gage.	do	31	32	Flanging—			
Gage—				Straight.	do	6	14
Simp.	do	16	32	Flashers.	Steam-Boilers.	55	18
Reciprocating-head.	do	10	32	Flashings.	Roofing.	24	29
Siphon-tube.	do	16	32	Flash-lamps.	Lamps and Gas-Fittings.	29	30
Filters—				Flasks and chargers.	Projectiles.	44	22
Beer.	Water-Distribution.	28	9	Flax harvesters.	Harvesters.	34	7
Cistern-cleaners.	do	45	9	and			
Cistern-supply.	do	50	9	Flax-thrashers.	Thrashing.	18	25
Decanters.	do	32	9	Fleece dividers and condensers.	Carding.	55	21
Faucet.	do	154	9	Fleece-removers.	do	35	21
Filtering-faucets.	do	37	9	Flexible blinds.	Curtains, Shades, and Screens.	63	8
Granular-bed.	do	269	9	Flexible ladders.	Fire Escapes and Ladders.	86	4
Materials.	do	27	9	Flexible ladders—			
Oil.	do	72	9	Reel.	do	87	4
Porous-wall.	do	61	9	Sectional.	do	90	4
Portable.	do	104	9	Sectional—			
Pressure.	do	55	9	Elevator.	do	22	4
Rotary-bed.	do	43	9	Single-stile.	do	34	4
Service-pipe.	do	67	9	Trolley.	do	11	4
Strainers.	do	102	9	Fliers.	Spinning.	67	21
Submerged.	do	65	9	Float.	Fluid-Pressure Regulators.	181	31
Systems.	do	52	9	Float-lever.	do	54	31
Finders.	Photography.	9	6	Flock-cutting.	Felt and Fur.	29	21
Finery-fires.	Metallurgy.	12	3	Flocking.	Paper-Making.	11	15
Finger-boards.	Music.	9	5	Flooding.	Fireproof Buildings.	20	4
Finger-rings.	Jewelry.	109	5	Flooring, bridges.	Bridges.	5	4
Finishing.	Cloth-Finishing.	68	21	Floors.	Carpentry.	57	29
Finishing cut pile fabrics.	do	12	21	Floors—			
Finishing yarn and thread.	Cordage.	132	21	Fixed.	Driers.	21	28
Fire.	Telegraphy.	202	16	Tile and metal.	Masonry.	6	4
Fire—				Tilting-section.	Driers.	27	28
Automatic.	do	132	16	Floors, Ceilings and—			
Engine-house apparatus.	do	17	16	Concrete.	Fireproof Buildings.	8	4
Non-interfering.	do	85	16	Concrete and metal.	do	80	4
Repeaters.	do	15	16	Metal.	do	10	4
Variable-signal.	do	43	16	Protected wood.	do	31	4
Variable-signal—				Tile.	do	57	4
Dial.	do	96	16	Tile and metal.	do	69	4
Fire-alarms.	Signals.	110	22	Floor-acts.	Woodworking-Tools.	149	29
Fire-alarms and extinguishers.	Telegraphy.	39	16	Flower-holders.	Trees, Plants, and Flowers.	26	1
Fire-brick.	Metallurgy.	113	3	Flower-pots.	do	42	1
Fire-dogs.	Stoves and Furnaces.	17	19	Flower-work.	do	15	1
Fire-extinguishers.	Ships.	10	22	Flowers, artificial.	Fine Arts.	88	5
Fire-extinguishers—				Flue and tubular.	Steam-Boilers.	217	18
Car-heater.	Fire-Extinguishers.	134	9	Flues and tubes, steam-boiler.	do	251	18
Chemical.	do	381	9	Flues, smoke and air.	Masonry.	11	4
Portable.	do	152	9	Fluid-delivery.	Coin-Controlled Apparatus.	55	14
Stationary.	do	356	9	Fluid-pressure—			
Fire-extinguishing compounds.	Chemicals.	33	6	Automatic.	Railway-Brakes.	155	34
				Brake piston indicators.	do	6	34
				Brake release valves.	do	28	34
				Derailment.	do	33	34
				Direct.	do	131	34
				Electric.	do	25	3
				Engineers' valves.	do	52	3
				Load-regulated valves.	do	21	3
				Momentum-pump.	do	70	3

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Fluid-pressure—				Friction—			
Pressure-retainers .....	Railway-Brakes .....	9	34	Shooting lines .....	Fire Escapes and Ladders ..	10	4
Train-pipe—				Tortuous .....	do .....	82	4
Couplings .....	do .....	8	34	Tortuous and jaw .....	do .....	68	4
Release-valves .....	do .....	6	34	Tortuous and jaw—	do .....		
Stop-cocks .....	do .....	8	34	Set-screw .....	do .....	26	4
Triple valves .....	do .....	104	34	Wheel-brake .....	do .....	23	4
Vacuum .....	do .....	63	34	Friction-generators .....	Electricity. Generation ..	35	26
Flushing .....	Sewerage .....	32	9	Frige-machines .....	Weaving .....	31	21
Flush-tank siphons .....	do .....	29	9	Friges .....	do .....	19	21
Flutes, Clarinets and .....	Music .....	35	5	Frogs .....	Railways .....	177	4
Fluting-irons .....	Laundry .....	161	27	Frogs—			
Fluxes .....	Metal-Welding .....	56	13	Movable-rail .....	do .....	21	4
Fly-nets .....	Harness .....	100	11	Movable-rail—			
Fly-wheels .....	Machine Elements .....	85	12	Lap .....	do .....	41	4
Focusing devices .....	Photography .....	11	6	Stub .....	do .....	75	4
Fog-signals .....	Signals .....	112	22	Spring-rail .....	do .....	63	4
Foil-condensers .....	Dentistry .....	30	20	Fruit and vegetable separa-	Thrashing .....	83	25
Foil-manufacture .....	Metal-Rolling .....	24	13	rators .....			
Folders .....	Printing .....	58	17	Fruit-cars .....	Railway Rolling-Stock .....	12	34
Folders—				(See Cars, fruit.)			
Longitudinal .....	do .....	17	17	Fruit-gatherers .....	Harvesters .....	389	7
Longitudinal and rotary .....	do .....	12	17	Fruit-lifters .....	Kitchen and Table Articles ..	9	8
Newspaper- wrapping	do .....	23	17	Fruit-squeezers .....	Vegetable Cutters and Crush-		25
machines .....					ers .....		
Oscillating .....	do .....	89	17	Fuel, artificial .....	Fuel .....	182	15
Reciprocating .....	do .....	49	17	Fuel-boxes .....	Stoves and Furnaces .....	41	19
Rotary .....	do .....	38	17	Fulling .....	Felt and Fur .....	72	21
Sheet-conveyers .....	do .....	14	17	Fulminates .....	Explosives .....	35	6
Folding .....	Cloth-Finishing .....	36	21	Fume-arresters .....	Metallurgy .....	75	3
Folding .....	Paper-Manufactures .....	284	17	Fumigation .....	Preserving .....	94	6
Folding reed-organ .....	Music .....	9	5	Funels .....	Water-Distribution .....	174	9
Followers, bill-files .....	Stationery .....	165	5	Furnaces .....	Steam-Boiler Furnaces .....	470	18
Food compounds .....	Preserving .....	206	6	Furnaces—			
Foot extensions .....	Artificial Limbs .....	4	20	Bagasse .....	Stoves and Furnaces .....	72	19
Foot-guards .....	Railways .....	55	4	Blank .....	Metallurgy .....	103	3
Foot-warmers .....	Stoves and Furnaces .....	121	19	Blank—			
Force .....	Pumps .....	200	9	Tire .....	do .....	98	3
Force-draft lamps .....	Lamps and Gas-Fittings .....	68	30	Blast .....	do .....	98	3
Force-feed .....	Seeders and Planters .....	196	1	Blast—			
Forging .....	Metal-Forging .....	42	13	Charging devices .....	do .....	23	3
Fork-guards .....	Cutlery .....	59	13	Charging devices—			
Forks .....	do .....	50	13	Bell and hopper .....	do .....	38	3
Forks .....	Harrows and Diggers .....	88	1	Protecting walls .....	do .....	23	3
Forks				Tuyeres .....	do .....	76	3
Adjustable heads .....	do .....	34	1	Tympis and slag-	do .....	14	3
Combined forks and	do .....	5	1	spouts .....			
shovels .....				Brick-kilns .....	Clay and Pottery .....	59	15
Fodder-forks .....	do .....	10	1	Cremation .....	Stoves and Furnaces .....	9	19
Potato forks and shov-	do .....	53	1	Crucible .....	Metallurgy .....	53	3
els .....				Electric .....	do .....	20	3
Forks and spoons .....	Cutlery .....	69	13	Forge .....	do .....	75	3
Form .....	Ships .....	103	22	Forge—			
Forming and preserving	Hydraulic Engineering .....	29	4	Tuyeres .....	do .....	200	3
channels .....				Hot-air .....	Stoves and Furnaces .....	825	19
Forming bats .....	Felt and Fur .....	133	21	Hot-air—			
Forms and platens .....	Driers .....	39	28	Magazine .....	do .....	41	19
Foundations .....	Masonry .....	14	4	Steam .....	do .....	102	19
Fountain-brushes—				Hydrocarbon .....	do .....	258	19
Blacking .....	Brushing and Scrubbing ..	28	27	Hydrocarbon—			
Brooms .....	do .....	9	27	Injector-burners .....	do .....	444	19
Hair .....	do .....	5	27	Rotort-vaporizers .....	do .....	245	19
Paint .....	do .....	50	27	Melting .....	Metallurgy .....	16	3
Scrubbers .....	do .....	24	27	Melting—			
Shaving .....	do .....	5	27	Glass-pots .....	do .....	26	3
Tooth .....	do .....	9	27	Glory-hole .....	do .....	15	3
Window-cleaners .....	do .....	49	27	Open-hearth .....	do .....	26	3
Fountain-discharge .....	Painting .....	26	31	Pot-hearth .....	do .....	74	3
Fountain-pens .....	Stationery .....	333	5	Tank .....	do .....	62	3
Fountains .....	Water-Distribution .....	68	9	Pigment .....	do .....	89	3
Founts .....	Lamps and Gas-Fittings .....	41	30	Portable .....	Stoves and Furnaces .....	178	19
Fracture apparatus .....	Artificial Limbs .....	118	20	Reverberatory .....			
Frame houses .....	Carpentry .....	46	29	Heating air .....	Metallurgy .....	94	3
Frames and trays .....	Driers .....	28	28	Necks and chimneys ..	do .....	17	3
Frames—				Water-walls and roofs	do .....	12	3
Piano .....	Music .....	57	5	Furniture .....	Printing .....	14	17
Piano-actions .....	do .....	21	5	Furniture—			
Picture .....	Fine Arts .....	228	5	Quoins .....	do .....	84	17
Fraud-preventives .....	Coin-Controlled Apparatus ..	22	14	Tools and appliances ..	do .....	36	17
Fraud-preventives—				Furs and pelts .....	Felt and Fur .....	103	21
Magnets .....	do .....	8	14	Fuse and packing ma-	Cordage .....	12	21
Washer-catchers .....	do .....	5	14	chines .....			
Freight-cars .....	Railway Rolling-Stock .....	161	34	Gage-cocks .....	Steam-Engine Valves .....	158	18
(See Cars, freight.)				Gage-lathes .....	Wood-Turning .....	55	29
Friction .....	Fire Escapes and Ladders ..	16	4	Gages .....	Measuring-Instruments .....	212	23
Friction—				Gages .....	Woodworking-Tools .....	63	29
Band-clamp .....	do .....	18	4	Gages—			
Jaw .....	do .....	55	4	Depth .....	Measuring-Instruments .....	14	23
Jaw—				Micrometer .....	do .....	85	23
Set-screw .....	do .....	13	4	Scratch .....	Woodworking-Tools .....	73	29
Reel .....	do .....	10	4	Surface .....	Measuring-Instruments .....	61	23
Reel—				Thickness .....	do .....	21	23
End-thrust .....	do .....	21	4	Track .....	do .....	31	23
Jaw-brake .....	do .....	25	4	Weather-board .....	Woodworking-Tools .....	121	29
Jaw-brake—				Weather-board—			
Tension .....	do .....	9	4	Marking .....	do .....	16	29
Strap-brake .....	do .....	31	4	Gage wheels and runners.	Plows .....	35	1

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Gauging .....	Woodworking-Machines.	142	29	Glass and pottery—			
Galleys .....	Printing .....	31	17	Jackets .....	Packing and Storing Vessels	158	32
Galleys—				Jackets—			
Galley-locks .....		57	17	Stands .....	do	26	32
Galley-rests .....		16	17	Wrapper .....	do	67	32
Galvanizing .....	Coating with Metal .....	141	3	Jars .....	do	123	32
Galvanometers .....	Electricity. Generation.	255	26	Jars—			
Game .....				Clamp .....	do	250	32
Apparatus .....	Games and Toys .....	378	7	Expanding-stopper .....	do	16	32
Belts .....	Accouterments .....	11	32	Screw-cap .....	do	107	32
Boards .....	Games and Toys .....	419	7	Screw-stopper .....	do	35	32
Counters .....	Signals .....	92	22	Swing-cover .....	do	33	32
(See Indicators, game-				Swing-fastener .....	do	77	32
counters.)				Stopper-fasteners .....	do	62	32
Gaugways .....	Care of Live Stock .....	23	2	Stopper-fasteners—			
Gaugways and bridges .....	Ships .....	46	22	Cap and tie .....	do	57	32
Garbage-receptacles .....	Packing and Storing Vessels	45	32	Screw-cap .....	do	13	32
(See Metallic vessels,				Swing .....	do	39	32
garbage-receptacles.)				Swing-stopper .....	do	115	32
Garden-beds .....	Trees, Plants, and Flowers	4	1	Swing-stopper—			
Garment-protectors .....	Apparel .....	148	24	Aside .....	do	5	32
Garment-supporters .....	Clasps, Buckles, and Buttons	500	11	Yoke .....	do	98	32
Garters and belts .....	Apparel .....	87	24	Yoke and lever .....	do	76	32
Gas and explosives .....	Safes .....	14	20	Yoke and top-lever .....	do	65	32
Gas and water fittings .....	Hardware-Making .....	179	13	Stopper-locks .....	do	34	32
Gas brackets and valves .....	Lamps and Gas-Fittings .....	75	30	Stopper-pullers .....	do	26	32
Gas-burners .....	do	125	30	Stoppers .....	do	105	32
Gas-burners—				Stoppers—			
Incandescent .....	do	115	30	Cap .....	do	30	32
Regenerative .....	do	141	30	Dose .....	do	40	32
Regulating .....	do	282	30	Expanding .....	do	40	32
Gas-cbecks .....	Ordnance .....	10	22	Internal .....	do	124	32
Gas-collection .....	Carbonating Beverages .....	18	32	Rotary .....	do	9	32
Gas-distribution .....	do	15	32	Screw .....	do	34	32
Gas-fittings .....	Lamps and Gas-Fittings .....	22	30	Screw-cap .....	do	19	32
Gas-generators .....	Carbonating Beverages .....	48	32	Tube .....	do	40	32
Gas-generators—				Valve .....	do	165	32
Acid-feed, siphon .....	do	10	32	Valve—			
Furnace .....	do	11	32	Screw .....	do	35	32
Rotary-stirrer .....	do	20	32	Glass and stone—			
Gas-lighting attachments .....	Lamps and Gas-Fittings .....	100	30	Curved surfaces .....	Grinding and Polishing .....	95	27
Gasometers .....	Com.-Controlled Apparatus .....	13	14	Plane surfaces .....	do	256	27
Gates .....	Fences .....	47	1	Glass-annealing—			
Gates—				Flattening-tables .....	Annealing and Tempering .....	16	3
Compound .....	do	50	1	Hearths .....	do	16	3
Dropping .....	do	36	1	Leers .....	do	25	3
Expanding .....	do	31	1	Leers—			
Jump .....	do	40	1	Grids .....	do	21	3
Oscillating .....	do	23	1	Muffles .....	do	1	3
Railway .....	do	12	1	Processes .....	do	12	3
Sliding .....	do	74	1	Glass-enameling .....	Glass .....	99	15
Swinging .....	do	88	1	Globe attachments .....	Lamps and Gas-Fittings .....	17	30
Wire .....	do	41	1	Globes .....	Educational Appliances .....	51	31
Gear-cutting .....	Metal Turning, Planing, and	131	13	Globes .....	Lamps and Gas-Fittings .....	65	30
	Milling .....			Globe-fastenings .....	Clasps, Buckles, and Buttons	600	11
Gearing .....	Harvesters .....	148	7	Gloves .....	Apparel .....	216	24
Gearing .....	Machine Elements .....	495	12	Glove-sewing machines .....	Sewing-Machines .....	30	24
Gearing .....	Wind-Wheels .....	44	28	Glucose .....	Sugar and Salt .....	121	6
Gearing—				Glue .....	Oils, Fats, and Glue .....	105	31
Belt .....	Machine Elements .....	275	12	Glue-pots .....	Stoves and Furnaces .....	92	19
Frictional .....	do	182	12	Governor .....	Steam-Engine Valves .....	63	13
Planetary .....	do	53	12	Grafting .....	Steam-Engines .....	139	18
Planetary—				Grain-drill cleaners .....	Trees, Plants, and Flowers .....	28	1
Eccentric .....	do	32	12	Graining and draining .....	Seeders and Planters .....	24	1
Screw .....	do	40	12	Grain-meter .....	Sugar and Salt .....	54	6
Sectional .....	do	76	12	Grain-meters—	Measuring-Instruments .....	104	23
Sprocket .....	do	72	12	Double-trap bottom .....	do	60	23
Sprocket—				Oscillating .....	do	100	23
Sprocket-chains .....	do	324	12	Positively-actuated .....	do	57	23
Yieldable .....	do	34	12	Rotating .....	do	92	23
Gem-setting .....	Jewelry .....	100	5	Twin buckets .....	do	55	23
General .....	Electricity. Electric Rail-	28	26	Grain-scourers—			
	ways .....			Centrifugal .....	Mills .....	48	25
Gibs and keys .....	Machine Elements .....	96	12	Concave face .....	do	59	25
Gilding. Leaf .....	Fine Arts .....	30	5	Conical .....	do	114	25
Gin—				Cylinder—			
Attachments .....	Brakes and Gins .....	29	21	Horizontal .....	do	233	25
Brushes .....	do	15	21	Vertical .....	do	242	25
Condensers .....	do	42	21	Disk-face .....	do	95	25
Feeders .....	do	72	21	Pestle-action .....	do	24	25
Feeders—				Reciprocating and end-	do	31	25
Pneumatic .....	do	44	21	less.			
Ribs .....	do	47	21	Screw-action .....	do	35	25
Rollers .....	do	9	21	Grain-separators—			
Saw-cleaners .....	do	16	21	Gravity .....	Thrashing .....	210	25
Saws .....	do	22	21	Oat, seed, and garlic .....	do	203	25
Girders and columns .....	Towers .....	244	4	Rotary screens .....	do	145	25
Glass and pottery—				Shaking screens .....	do	727	25
Bottles and jugs .....	Packing and Storing Vessels	77	32	Grain-tallies .....	Measuring-Instruments .....	81	23
Bottles and jugs—				Grain wheels and casters .....	Harvesters .....	35	7
Brush and spreader .....	do	150	32	Granaries and bins .....	Thrashing .....	35	25
Neck-collars .....	do	6	32	Granulating .....	Sbaping Fluid Metal .....	28	3
Boxes and tanks .....	do	11	32	Granulating .....	Tobacco .....	26	2
Ejectors .....	do	39	32	Graphophones .....	Acoustics .....	122	23
				Graphophone-tablets .....	do	41	23

\*Reissuo.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Grapples .....	Hoisting.....	207	12	Guns—			
Grates .....	Stoves and Furnaces .....	42	19	Breech-loading—			
Grates—				Breech-block swing-	Firearms .....	9	22
Adjustable .....	do .....	47	19	ing on center or			
Compound-movement .....	do .....	53	19	trunnions.	do .....	69	22
Cut-offs .....	do .....	13	19	Breech-block swing-			
Fireplace .....	do .....	118	19	ing on longitudinal	do .....	34	22
Raking attachment .....	do .....	45	19	pin or hinge.			
Reciprocating .....	do .....	109	19	Breech-block swing-	do .....	57	22
Rocking-bar .....	do .....	374	19	ing upward and			
Rotary .....	do .....	204	19	backward.	do .....	4	22
Vertical-movement .....	do .....	42	19	Breech-block swing-	do .....	9	22
Grates and grate-bars,	do .....	264	19	ing upward and for-			
stationary.				ward.	do .....	8	22
Gridirons .....	do .....	278	19	Faucet breech-block,	do .....	13	22
Grilles .....	Iron Structures .....	14	4	chambered.	do .....	3	22
Grinding-mills—				Faucet breech-block			
Balancing millstones .....	Mills .....	47	25	with chamber in			
Ball and drum .....	do .....	148	25	front.	do .....	31	22
Bark .....	do .....	66	25	Gas-operated .....	do .....	39	22
Chasing .....	do .....	211	25	Recoil-operated .....	do .....	169	22
Coffee .....	do .....	117	25	Rotating sleeve on			
Compound-movement .....	do .....	132	25	barrel.	do .....	3	22
Cone and shell .....	do .....	244	25	Cane .....	do .....	25	22
Crushing-rolls .....	do .....	417	25	Cartridge-holders, tem-	do .....	20	22
Cylinder and concave .....	do .....	185	25	porary.			
Disk-action—				Magazine .....	do .....	179	22
Horizontal .....	do .....	197	25	Magazine—			
Vertical .....	do .....	193	25	Barrel hinged to stock .....	do .....	4	22
Feed-regulators .....	do .....	165	25	Barrel rotating on par-	do .....	2	22
Grain-samplers .....	do .....	18	25	allel pin.	do .....	3	22
Grist-alarms .....	do .....	24	25	Barrel sliding forward .....	do .....	25	22
Hominy .....	do .....	65	25	Barrel swinging later-	do .....	32	
Impact pulverizer .....	do .....	30	83	ally on vertical pin.	do .....		
Knife-action .....	do .....	117	25	Breech-block sliding	do .....	20	22
Mill-spindles .....	do .....	227	25	vertically in mor-			
Millstone-dress .....	do .....	178	25	tise.	do .....	179	22
Millstone-exhaust .....	do .....	97	25	Breech-block swing-			
Millstone-trams .....	do .....	8	25	ing backward and	do .....	35	22
Paint .....	do .....	38	25	downward.			
Rotary beaters .....	do .....	179	25	Breech-block swing-	do .....	4	22
Grippers .....	Railways .....	61	4	ing downward and	do .....	2	22
Grippers—				backward.	do .....	3	22
Automatic release .....	do .....	54	4	Breech-block swing-	do .....	6	22
Coal-car .....	do .....	19	4	ing laterally back-	do .....	5	22
Friction .....	do .....	172	4	ward.	do .....	4	22
Friction-belt .....	do .....	13	4	Breech-block swing-	do .....	26	22
Overstepping .....	do .....	16	4	ing laterally for-			
Roller .....	do .....	49	4	ward.	do .....	3	22
Sprocket-wheel .....	do .....	41	4	Breech-block swing-			
Whelp-wheel .....	do .....	21	4	ing on center or	do .....	178	22
Grooming .....	Care of Live Stock .....	27	2	trunnions.	do .....	131	22
Guard-rail clamps .....	Railways .....	23	4	Breech-block swing-	do .....	26	22
Guards .....	Lamps and Gas-Fittings .....	20	30	ing on longitudinal			
Guards for pedals .....	Music .....	14	5	pin or hinge.	do .....	5	22
Guide-machines .....	Linotyping .....	5	30	Breech-block swing-	do .....	4	22
Guides .....	Sawing-Machines .....	259	24	ing upward and			
Guiding .....	Cloth-Finishing .....	19	21	backward.	do .....		
Guitars, Banjos and .....	Music .....	146	5	Breech-block swing-	do .....		
Gun and pistol holders .....	Accouterments .....	19	32	ing upward and for-			
Gun-barrels .....	Arms and Projectiles. Mak-	19	13	ing.			
Gun-barrels .....	Firearms .....	49	22	Longitudinally-recip-			
Gunpowder .....	Explosives .....	81	6	rocating breech-			
Guns—				bolt—			
Air and spring .....	Firearms .....	259	22	Firing-pin impelled	do .....	178	22
Blow .....	do .....	11	22	by rotating ham-			
Breech-loading—				mer.	do .....	131	22
Barrel hinged to stock .....	do .....	16	22	Spring-impelled fir-	do .....	26	22
Barrel rotating on par-	do .....	28	22	ing-pin.			
allel pin.				Rotating carrier filled	do .....		
Barrel sliding forward .....	do .....	32	22	from a fixed mag-			
Barrel swinging later-	do .....	20	22	azine and dis-			
ally on vertical pin.				charged in the car-			
Barrel tilting up at	do .....	358	22	rier.	do .....	14	22
breech.				Gun-trimmings .....	Paving .....	57	15
Barrel tilting up at	do .....	2	22	Gutters .....	Brakes and Gins .....	83	21
muzzle.				Hackling-machines .....	Toilet .....	77	24
Breech-block drawn	do .....	243	22	Hair and wigs .....	Medicines .....	39	6
back by band or le-				Hair dyes and tonics .....	Brakes and Gins .....	48	21
ver, (bolt-gun.)				Hair-pickers .....	Toilet .....	54	24
Breech-block sliding	do .....	8	22	Hair-pins .....	Harness .....	325	11
laterally in mortise.				Hame-fasteners .....	do .....	200	11
Breech-block sliding	do .....	99	22	Hames .....	do .....	200	11
vertically in mor-				Hame-tngs .....	Tools and Implem-	40	13
tise.				Hammers .....	Making .....		
Breech-block swing-	do .....	169	22	Hammers and hatchets .....	Woodworking-Tools .....	251	29
ing backward and				Hammers, piano-actions .....	Music .....	20	5
downward.				Hammocks .....	Beds .....	71	8
Breech-block swing-	do .....	61	22	Hammocks—			
ing downward and				Hooks .....	do .....	6	8
backward.				Stretchers .....	do .....	27	8
Breech-block swing-	do .....	11	22	Supports .....	do .....	63	8
ing laterally back-				Hand attachments, exer-	Music .....	7	5
ward.				cising devices.			
Breech-block swing-	do .....	7	22	Hand-barrows .....	Carriages and Wagons .....	23	10
ing laterally for-				Hand-binders—	Harvesters .....	18	7
ward.				Attachments .....			

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Hand-binders—				Harrow-teeth.....	Harrows and Diggers.....	13	1
Elevated delivery—				Harrow-teeth—			
Rear.....	Harvesters.....	40	7	Spike.....	do.....	33	1
Side.....	do.....	105	7	Spring.....	do.....	91	1
Flat delivery.....	do.....	15	7	Trailing and draw-cut.....	do.....	34	1
Manual traction.....	do.....	12	7	Harvester-irons.....	Tools and Implements.....	36	13
Hand-cars.....	Railway Rolling-Stock.....	11	34	Hasp-fasteners.....	Making.....		
(See Cars, hand.)				Hat and coat racks.....	Locks and Latches.....	54	20
Handkerchiefs.....	Apparel.....	2	24	Hat and fur cases.....	Furniture.....	79	8
Handle-bars. Steering-heads and	Vehelpeders.....	164	7	Hat blocking and stretching.....	Baggage.....	54	32
Handles.....	Builders' Hardware.....	139	30	Hat-blocks.....	Apparel.....	137	24
Handles, braces.....	Plows.....	38	1	Hat-brushing and finishing.....	do.....	28	24
Handles, coffin.....	Builders' Hardware.....	6	20		do.....	49	24
Handles and sticks.....	do.....	83	20	Hatch-openers.....	Fences.....	35	1
Hand-levers.....	Umbrellas and Canes.....	113	24	Hat-ironing.....	Apparel.....	55	24
Hand-levers—	Railway-Brakes.....	11	34	Hat-pouncing.....	do.....	101	24
Ratchet-drum.....	do.....	9	34	Hat-pressing.....	do.....	105	24
Ratchet-segment.....	do.....	31	34	Hats and caps.....	do.....	416	24
Hand-nailing implements	Boots and Shoes.....	280	11	Hat-sweats.....	do.....	96	24
Handpieces.....	Dentistry.....	105	20	Hat-ventilators.....	do.....	113	24
Handpieces—				Hay-forks—			
Angle attachments.....	do.....	34	20	Corkscrew.....	Hoisting.....	16	12
Hand-rakers.....	Harvesters.....	103	7	Grapples.....	do.....	155	12
Hand-rests.....	Stationery.....	52	5	Harpoon.....	do.....	224	12
Hand-rubbers.....	Laundry.....	38	27	Tilting.....	do.....	121	12
Hand-saw attachments.....	Woodworking-Tools.....	34	29	Hay-loaders—			
Handsaws.....	do.....	187	29	Endless belts.....	Harvesters.....	278	7
Hand-screens.....	Trees, Plants, and Flowers.....	43	1	Intermittent.....	do.....	63	7
Hand-stamps.....	Printing.....	50	17	Lifting-reels.....	do.....	13	7
Hand-stamps—				Walking-rakes.....	do.....	46	7
Check-punches.....	do.....	111	17	Hay-racks.....	Carriages and Wagons.....	115	10
Head and handle.....	do.....	81	17	Hay-slings.....	Hoisting.....	86	12
Head and handle—				Headers.....	Harvesters.....	93	7
Inking attachment.....	do.....	29	17	Headlights.....	Lamps and Gas-Fittings.....	122	30
Mutators.....	do.....	75	17	Head-rests.....	Railway Rolling-Stock.....	6	34
Roller.....	do.....	9	17	(See Cars, passenger.)			
Roller—				Hearses.....	Carriages and Wagons.....	11	10
Inking attachment.....	do.....	41	17	Heaters.....	Driers.....	66	28
Inking attachment.....	do.....	100	17	Heaters.....	Painting.....	7	31
Mutators.....	do.....	23	17	Heaters—			
Perforators.....	do.....	23	17	Barrel.....	Stoves and Furnaces.....	59	19
Sealing-tools.....	do.....	44	17	Curling-iron.....	do.....	22	19
Settable type-carrier.....	do.....	39	17	Dish.....	do.....	13	19
Settable type-carrier—				Electric.....	do.....	151	19
Clock-set.....	do.....	55	17	Electric—			
Inking attachment.....	do.....	53	17	Pressing and ironing.....	do.....	14	19
Tumblers.....	do.....	51	17	Flat-iron.....	do.....	150	19
Hanging-baskets.....	Trees, Plants, and Flowers.....	17	1	Frictional.....	do.....	8	19
Hanks, cringles, and hoops.....	Ships.....	101	22	Lunch.....	do.....	71	19
Harbors.....	Hydraulic Engineering.....	5	4	Solar.....	do.....	28	19
Hardening apparatus.....	Annealing and Tempering.....	31	3	Soldering-iron.....	do.....	114	19
Hardening apparatus—				Heaters and driers.....	Photography.....	6	6
Bands and wire.....	do.....	38	3	Heating drums.....	Stoves and Furnaces.....	386	19
Clamps.....	do.....	34	3	Heating feed-water—			
Hardening processes.....	do.....	48	3	Furnace-gases.....	Steam-Boilers.....	251	18
Hardening processes—				Steam.....	do.....	266	18
Molten metal.....	do.....	2	3	Steam-injected.....	do.....	299	18
Solutions.....	do.....	51	3	Heating systems—			
Hard rubber.....	Caoutchouc and Minor Plastics.....	61	15	Air.....	Stoves and Furnaces.....	64	19
Harmonicas.....	Music.....	31	5	Air, steam or water.....	do.....	13	19
Harmonica-supports.....	do.....	9	5	Car—			
Harmonic attachments.....	do.....	17	5	Air.....	do.....	160	19
Harmonic dampers.....	do.....	7	5	Steam.....	do.....	9	19
Harmonic dampers—				Water.....	do.....	79	19
Violin.....	do.....	9	5	Local—			
Harmony and transposition charts.....	do.....	38	5	Air.....	do.....	33	19
Harmony-charts.....	do.....	38	5	Steam.....	do.....	51	19
Harness.....	Harness.....	400	11	Water.....	do.....	33	19
Harness—				Steam.....	do.....	80	19
Attachments.....	do.....	600	11	Train—			
Machines.....	do.....	200	11	Air.....	do.....	79	19
Pads.....	do.....	200	11	Smoke.....	do.....	7	19
Saddles.....	do.....	600	11	Steam.....	do.....	117	19
Tools.....	do.....	75	11	Water.....	do.....	18	19
Harpoons and spears.....	Fishing and Trapping.....	15	22	Water—			
(See Fishing, harpoons and spears.)				Steam.....	do.....	52	19
Harps.....	Music.....	24	5	Water.....	do.....	35	19
Harps and hangers.....	Lamps and Gas-Fittings.....	302	30	Water—			
Harrows.....	Harrows and Diggers.....	388	1	Steam.....	do.....	12	19
Harrows—				Heddle-machines.....	Weaving.....	42	21
Changeable-form.....	do.....	32	1	Heddles—			
Disk.....	do.....	246	1	Making.....	Wire-Working.....	14	14
Expandable.....	do.....	90	1	Hedge-training.....	Trees, Plants, and Flowers.....	69	1
Flexible.....	do.....	68	1	Hedge-trimmers.....	Harvesters.....	78	7
Revolving.....	do.....	71	1	Heel-machines.....	Boots and Shoes.....	320	11
Rotary.....	do.....	159	1	Heel-nailing machines.....	do.....	400	11
Spring-tooth.....	do.....	90	1	Heels.....	do.....	400	11
Tooth-cleaners.....	do.....	20	1	Heel-stiffener machines.....	do.....	210	11
Wheel.....	do.....	189	1	Height-measurers.....	Coin-Controlled Apparatus.....	4	14
Wheel—				Helical tools.....	Hides, Skins, and Leather.....	61	31
Rotary.....	do.....	45	1	Heliostats.....	Optics.....	22	30
				Hammers.....	Sewing-Machines.....	166	24

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Hemp and flax harvesters.	Harvesters	34	7	Horseshoe-machines	Chains, Staples, and Horse-shoes.	273	13
Hemp, flax, and hair.	Spinning	89	21	Horseshoe-nail—			
Hermetic sealing.	Packing and Storing Vessels	57	32	Blank-finishing	Nails and Spikes	133	13
(See Metallic vessels, hermetic sealing.)				Cutting	do	71	13
Hinges	Builders' Hardware	58	20	Forging	do	152	13
Hinges	Hardware-Making	70	13	Hose and tubing	Hose and Belting	270	41
Hinges—				Hose-bridges	Railways	63	4
Awning-blind	Builders' Hardware	20	20	Hose-carriages	Carriages and Wagons	88	10
Box	do	56	20	Hose-machines	Hose and Belting	60	11
Coach	do	22	20	Hose-patches	Water-Distribution	43	9
Concealed	do	25	20	Hot-air registers	Stoves and Furnaces	171	19
Door	do	81	20	Hot-blast ovens—			
Door—				Double-surface	Metalurgy	71	3
Butt	do	100	20	Single-surface	do	72	3
Strap	do	56	20	Hot-blast valves	do	28	3
Flush	do	28	20	Honnds	Carriages and Wagons	51	10
Gate	do	110	20	Household, sifters and screens.	Mills	669	25
Lock—				Houses and kilns	Driers	251	28
Frictional	do	9	20	Houses, apartment	Masonry	29	4
Positive	do	230	20	Hub-attaching devices	Carriages and Wagons	392	10
Longitudinally-adjustable.	do	13	20	Hub-caps	do	45	10
Safe	do	17	20	Hubs	do	726	10
Spring	do	251	20	Hydrants and plugs	Water-Distribution	628	9
Table	do	31	20	Hydraulic motors for elevators.	Hydraulic Motors	432	9
Vertically-adjustable	do	13	20	Hydraulic propellers	Marine Propulsion	75	22
Hitching-posts and ties.	Care of Live Stock	123	2	Hydrogen	Gas	84	31
Hitching-straps	Harness	100	11	Hydrogen-platinum lights	Lamps and Gas-Fittings	18	30
Hobby-horses	Games and Toys	110	7	Hydrometers	Measuring-Instruments	29	23
Hoes	Harrows and Diggers	111	1	Hygrometers	do	18	23
Hoes—				Ice boats and breakers	Ships	37	22
Adjustable	do	27	1	Ice-cream freezers	Refrigeration	205	28
Compound	do	74	1	Ice-cream freezers—			
Compound—				External freezing	do	59	28
Adjustable	do	13	1	Ice-creepers	Boots and Shoes	160	11
Horizontal	do	52	1	Ice-crushers	Mills	32	25
Horizontal—				Ice-machines	Refrigeration	491	28
Adjustable	do	17	1	Ice picks and shavers	Mills	83	25
Interchangeable	do	26	1	Idle-pulley supports	Journal-Boxes, Pulleys, and Shafting.	21	12
Toothed blades	do	12	1				
Weeding	do	13	1	Igniting devices—			
Hoes and shovels	Tools and Implements.	155	13	Automatic	Electricity. Special Applications.	147	16
Hog-scraping machines	Butchering	31	25	Inductional	do	28	16
Hoisting-buckets	Hoisting	127	12	Manual	do	141	16
Hoists	Fire Escapes and Ladders	41	4	Portable	do	35	16
Hoists—				Implements	Firearms	143	22
Fixed guides	do	43	4	Implements	Refrigeration	132	28
Movable guides	do	17	4	Implements	Ships	82	22
Pulley-block	do	50	4	Incandescent	Electric Lighting	310	16
Reciprocating cages	do	26	4	Incandescent—			
Shooting-spar	do	34	4	Special features	do	228	16
Trolley	do	44	4	Stopper	do	89	16
Holdbacks	Carriages and Wagons	198	10	Inclined planes	Railways	71	4
Holders	Gas	67	31	Inclined planes—			
Holders—				Traction	do	34	4
Brush-head	Brushing and Scrubbing	20	27	Incrustation	Steam-Boilers	53	18
Convertible mop and brush.	do	29	27	Incubators	Care of Live Stock	129	2
Copy	Stationery	144	5	Indenting and filling machines.	Painting	5	31
Mop-heads	Brushing and Scrubbing	150	27	Independent - reservoir lamps.	Lamps and Gas-Fittings	324	30
Pen	Stationery	241	5	Indexing	Bookbinding	149	5
Hollow augers	Woodworking-Tools	23	29	Indexing—			
Hollow grates—				Card-catalogues	do	9	5
Air	Steam-Boiler Furnaces	67	18	Index-wheel	Type-Writing Machines	137	30
Water	do	77	18	Indicators	Electric Signaling	57	16
Hollow piston-rod	Pumps	175	9	Indicators	Music	6	5
Hollow-tile walls	Masonry	12	4	Indicators	Signals	75	22
Hoof and shoe spreaders	Farmery	74	14	Indicators	Steam-Boilers	333	18
Hoof-cleaners and trimmers.	do	68	14	Indicators—			
Hoof-pads	do	156	14	Barber's turn	Signals	8	22
Hooks	Clasps, Buckles, and Buttons	609	11	Fluid-pressure-brake piston-indicators.	Railway-Brakes	6	34
Hooks and eyes	do	300	11	Game-counters	Signals	92	22
Hoop-drivers	Coopering	70	29	Identity	do	6	22
Hoops and clasps	Crinoline and Corsets	89	24	Office	do	13	22
Hoop-skirts	do	156	24	Peg	do	14	22
Hoops. Trundles and	Games and Toys	9	7	Rotary	do	99	22
Hop-culture	Trees, Plants, and Flowers	53	1	Sliding	do	42	22
Hopples	Care of Live Stock	120	2	Station	do	358	22
Horse-boots	Harness	100	11	Station	Electric Signaling	29	16
Horse-collars	do	400	11	Induction-coils	Coin-Controlled Apparatus	26	14
Horse-detachers	Carriages and Wagons	408	10	Induction-coils	Electricity. Generation	91	26
Horse-rakes—				Inductoriums, transformers, rotary.	do	28	26
Draft dumpers	Harvesters	341	7	Ingots and piles—			
Drags	do	119	7	Bar	Metal-Welding	82	13
Hand-dumpers	do	391	7	Beam	do	20	13
Hay-cockers	do	32	7	Plate	do	51	13
Rake-teeth	do	98	7	Rail	do	37	13
Side-delivery	do	25	7	Tube	do	14	13
Horseshoe-bars. Making	Chains, Staples, and Horse-shoes.	106	13	Inhalers and respirators	Surgery	305	6
Horseshoe-calks. Making	do	114	13	Inhalers and respirators—			
				Mask	do	52	6

## SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Injectors and ejectors.....	Injectors and Ejectors.....	540	18	Kaleidoscopes.....	Optics.....	15	30
Inking apparatus.....	Printing.....	80	17	Keyboard attachments, exercising devices.	Music.....	17	5
Inking apparatus—				Keyboard, exercising devices.	do.....	14	5
Composition rollers, making and preserving.	do.....	30	17	Keyboards.....	Type-Writing Machines.....	36	30
Fountains.....	do.....	52	17	Keyboards and keys.....	Music.....	85	5
Pads and holders.....	do.....	39	17	Keyboard self-playing attachments.	do.....	44	5
Rollers.....	do.....	22	17	Keyed zithers.....	do.....	6	5
Rollers—				Key-fasteners.....	Locks and Latches.....	82	20
Compositions.....	do.....	27	17	Key-fasteners—			
Traveling doctor-plate.....	do.....	22	17	Portable.....	do.....	39	20
Traveling roller and plate.	do.....	51	17	Key-holding devices.....	Music.....	9	5
Inks—				Keyhole-guards.....	Locks and Latches.....	47	20
Copying and sensitive.....	Painting.....	31	31	Keyhole-guards—			
Printing.....	do.....	70	31	Sliding and pivoted.....	do.....	66	20
Writing.....	do.....	48	31	Key-seat cutters.....	Metal Turning, Planing, and Milling.....	46	13
Inkstands.....	Stationery.....	495	5	Key-wheel.....	Type-Writing Machines.....	139	30
Insect-destroyers—				Keys.....	Locks and Latches.....	88	20
Catchers.....	Fishing and Trapping.....	121	22	Keys.....	Telegraphy.....	120	16
Fumigators.....	do.....	115	22	Keys and keyboards.....	Music.....	85	5
Moth-extermimators.....	do.....	3	22	Keys and keyboards—			
Powder-dusters.....	do.....	141	22	Touch-regulators.....	do.....	10	5
Insect-guards.....	Furniture.....	25	8	King-bolts.....	Carriages and Wagons.....	58	10
Insecticides.....	Medicines.....	44	6	Kitchen-cabinets.....	Furniture.....	168	8
Insulating compounds.....	Caoutchouc and Minor Plastics.	153	15	Kites.....	Games and Toys.....	26	7
Insulators.....	Electricity. Conductors.....	325	26	Knapsacks and haversacks.	Accessories.....	32	32
Insulators.....	Music.....	14	5	Knapsack-slings.....	do.....	56	32
Interlocking.....	Railways.....	31	4	Knee-swells.....	Music.....	7	5
Interlocking—				Knife-erasers.....	Stationery.....	49	5
Rods.....	do.....	13	4	Knitting and netting—			
Selectors.....	do.....	23	4	Circular, circular machines.	Knitting and Netting.....	85	21
Stands.....	do.....	14	4	Straight, straight machines.	do.....	163	21
Stands—				Knives.....	Cutlery.....	241	13
Catch.....	do.....	34	4	Knives—			
Plunger.....	do.....	27	4	Gage.....	do.....	49	13
Internal remedies.....	Medicines.....	326	6	Hay.....	do.....	54	13
Intestine-cleaners.....	Butchering.....	24	25	Pocket.....	do.....	205	13
Introducing smoke and gases.	Steam-Boilers.....	50	18	Knob attachments.....	Locks and Latches.....	61	20
Iron.....	Paving.....	75	15	Knob attachments.....			
Iron and steel direct.....	Metallurgy.....	48	3	Key-fastener.....	do.....	19	20
Iron and steel direct—				Screw-spindle.....	do.....	69	20
Apparatus.....	do.....	34	3	Set-screw and pin-fastener.	do.....	45	20
Bricks.....	do.....	32	3	Spring-fastener.....	do.....	41	20
Flux.....	do.....	18	3	Wedge-fastener.....	do.....	22	20
Gases.....	do.....	44	3	Knob-roses.....	do.....	30	20
Retorts and hearths.....	do.....	37	3	Knobs.....	do.....	105	20
Slag.....	do.....	12	3	Knob-spindle fasteners.....	do.....	36	20
Sponge.....	do.....	19	3	Label-affixers.....	Paper-Manufactures.....	46	17
Ironing-machines.....	Laundry.....	267	27	Label-affixers—			
Ironing-tables.....	do.....	434	27	Cutter and plunger.....	do.....	65	17
Iron oxides.....	Coating with Metal.....	24	3	Label-runway machines.	do.....	20	17
Irregular forms.....	Wood-Turning.....	122	29	Label-runway machines.			
Irrigating and sprinkling.....	Water-Distribution.....	422	9	Label-bed.....	do.....	37	17
Jacquard mechanism.....	Weaving.....	80	21	Magazine.....	do.....	33	17
Jails.....	Iron Structures.....	82	4	Pickers.....	do.....	14	17
Japanning.....	Painting.....	27	31	Label and tag machines.....	do.....	46	17
Jar-lifters.....	Kitchen and Table Articles.....	62	8	Label-holders.....	Advertising.....	60	32
Jars.....	Packing and Storing Vessels.....	123	32	Label-holders—			
(See Glass and pottery, jars.)				Clip.....	do.....	40	32
Jaw-braces.....	Dentistry.....	7	20	Freight-car.....	do.....	35	32
Jetties, sectional.....	Hydraulic Engineering.....	10	4	Hat.....	do.....	13	32
Joining.....	Wire-Working.....	84	14	Slide.....	do.....	40	32
Joining staves.....	Coopering.....	121	29	Street-car.....	do.....	15	32
Journal-boxes.....	Journal-Boxes, Pulleys, and Shafting.....	447	12	Labels.....	do.....	50	32
Journal-boxes—				Labels, attaching.....	Paper-Manufactures.....	176	17
Brasses.....	do.....	83	12	Lace paper. Perforating and	do.....	154	17
Compositions.....	do.....	180	12	Lactometers.....	Measuring-Instruments.....	15	23
Guards.....	do.....	155	12	Ladders.....	Fire Escapes and Ladders.....	22	4
Lids.....	do.....	139	12	Ladders.....	Railway Rolling-Stock.....	10	34
Lubricating.....	do.....	222	12	(See Cars, sleeping.)			
Lubricating—				Ladders—			
Band-applying.....	do.....	27	12	Collapsible.....	Fire Escapes and Ladders.....	9	4
Centrifugal.....	do.....	38	12	Escape—			
Coolers.....	do.....	47	12	Balcony.....	do.....	69	4
Roller applying.....	do.....	27	12	Fixed.....	do.....	75	4
Roller-applying—				Mounting.....	do.....	32	4
Elastically supported.	do.....	121	12	Sectional hand.....	do.....	13	4
Yieldably-supported pads.	do.....	132	12	Shooting and truck.....	do.....	164	4
Roller-bearings—				Trolley.....	do.....	23	4
Ball.....	do.....	147	12	Extension.....	do.....	58	4
Ball and cylinder.....	do.....	41	12	Feet.....	do.....	17	4
Cylinder.....	do.....	96	12	Flexible.....	do.....	86	4
Cylinder—				Flexible—			
Circular series.....	do.....	360	12	Reel.....	do.....	87	4
Thrust-bearings.....	do.....	75	12	Sectional.....	do.....	90	4
Jugs. Bottles and.....	Packing and Storing Vessels.....	77	32	Sectional—			
(See Glass and pottery, bottles and jugs.)				Elevator.....	do.....	22	4
Justifying devices.....	Linotyping.....	8	30				



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Ladders—				Leaves and covers	Bookbinding	28	5
Flexihle—				Leg-joints	Artificial Limbs	8	20
Single-stile	Fire Escapes and Ladders	34	4	Legs	do	193	20
Trolley	do	11	4	Legs—			
Hooks	do	16	4	Piano	Music	3	5
Jacks	do	33	4	Lenses	Optics	58	30
Sectional	do	35	4	Letter-box bells	Signals	31	22
Step	do	385	4	Letter-boxes	Packing and Storing Vessels	17	32
Step—				Letter-boxes—			
Store-service	do	26	4	Chutes—			
Stops	do	85	4	Discharge	do	10	32
Trussed	do	10	4	Double-trap	do	12	32
Ladles	Kitchen and Table Articles	17	8	Receiving	do	25	32
Lamp attachments	Lamps and Gas-Fittings	27	30	Receiving—			
Lampblack	Painting	78	31	Retary	do	25	32
Lamp-hoxes	Lamps and Gas-Fittings	25	30	Detachable receptacle	do	22	32
Lamp-burners	do	781	30	House	do	18	32
Lamp-burners—				House—			
Argand	do	129	30	Closures	do	12	32
Multiple-wick	do	73	30	Closures—			
Lamp-lighting attach-	do	74	30	Bottom	do	13	32
ments				Pivoted-body	do	30	32
Lamps	do	60	30	Sliding	do	10	32
Lamps—				Collection and deliv-			
Bicycle	do	24	30	ery			
Bracket	do	35	30	Door-jamb lock	do	10	32
Carriage	do	30	30	Name-plate	do	23	32
Cigar-lighting	do	25	30	Package	do	18	32
Flash	do	29	30	Package—			
Forced-draft	do	68	30	Locking	do	5	32
Independent-reservoir	do	324	30	Signal	do	23	32
No-chimney	do	106	30	Indicators	do	25	32
Special	do	91	30	Parcel	do	27	32
Street	do	157	30	Leveling-instruments	Optics	93	30
Lampwork	Sheet-Metal Work, Making	12	14	Levels—			
Land-markers	Seeders and planters	102	1	Plumb	Measuring-Instruments	102	23
Land-rollers	Harrows and Diggers	47	1	Spirit	do	154	23
Land-rollers—				Lewis	Hoisting	7	12
Furrowers and markers	do	32	1	Life boats and rafts	Boats	268	22
Pivoted	do	71	1	Life-preservers	do	152	22
Weighted cylinders	do	19	1	Lift	Pumps	422	9
Weighted frames	do	18	1	Lift and force	do	113	9
Landslides	Plows	40	1	Lifters—			
Lantern-holders	Lamps and Gas-Fittings	82	30	Barrel and box	Hoisting	22	12
Lanterns	do	440	30	Picture	do	12	12
Lanterns—				Spittoon	do	10	12
Dark	do	12	30	Spool	do	9	12
Signal	do	110	30	Store goods	do	28	12
Submarine	do	14	30	Lifting-jacks	do	44	12
Tubular	do	305	30	Lifting-jacks—			
Lapping	Carding	22	21	Bar and cam-lever	do	83	12
Lard-coolers	Refrigeration	48	28	Lever	do	270	12
Laryngoscopes	Surgery	7	6	Lever and lifting-bar	do	311	12
Lasting and lasting-tools	Boots and Shoes	160	11	Lever, bar, and clutch-			
Lasting-machines	do	500	11	loop	do	82	12
Lasts	do	400	11	Lever, bar, and double-			
Latches and locks com-	Locks and Latches	263	20	acting pawls	do	55	12
bined				Lever, bar, and pawl	do	108	12
Latches—				Rack and pinion	do	94	12
Automatic detent	do	19	20	Screw	do	170	12
Gate	do	237	20	Light and air ports	Ships	31	22
Gravity	do	61	20	Lighting implements	Lamps and Gas-Fittings	104	30
Lifting	do	100	20	Lighting systems	do	6	30
Lifting—				Lighting-arresters	Telegraphy	50	16
Hooked ends	do	51	20	Lightning-arresters—			
Pivoted ends	do	55	20	Magnetic	do	53	16
Reversible	do	106	20	Thermal	do	33	16
Sliding	do	250	20	Lighting-rods	Electricity, Conductors	251	26
Swinging	do	48	20	Lights—			
Lath and chain	Driers	22	25	Arc—			
Lathe appliances	Wood-Turning	76	29	Gravity-feed	Electric Lighting	32	16
Lathe-chucks	Metal Turning, Planing, and	224	13	Gravity-feed—			
	Milling			Clutch	do	59	16
Lathing	Carpentry	61	29	Double dog-clutch	do	81	16
Lathing	Iron Structures	79	4	Gear-clutch	do	89	16
Lathing—				Pivot dog-clutch	do	93	16
Wire	do	50	4	Ring-clutch	do	140	16
Laundries	Laundry	18	27	Positive-feed	do	19	16
Lawn-mowers	Harvesters	293	7	Positive-feed—			
Lawn-mowers—				Clutch	do	27	16
Grass-catchers	do	60	7	Electric gear-clutch	do	34	16
Lawn-tennis	Games and Toys	55	7	Gear-clutch	do	31	16
Lawn-vases	Trees, Plants, and Flowers	15	1	Step gear-clutch	do	55	16
Lazy-tongs	Fire Escapes and Ladders	108	4	Special features	do	174	16
Lead	Metallurgy	42	3	Christmas-tree	Lamps and Gas-Fittings	40	30
Lead and crayon holders	Stationery	260	5	Decorative	do	18	30
Lead-covered	Electricity, Conductors	56	26	Head	do	122	30
Lead salts	Painting	194	31	Hydrogen-platinum	do	18	30
Leaf gilding	Fine Arts	30	5	Signal	do	26	30
Leaf-turners	Music	227	5	Light-signals	Railways	66	4
Leak-alarms	Signals	19	22	Lime-kilns	Artificial Stone, Lime, and	210	15
Leak-stoppers	Ships	24	22		Cement		
Lease-formers	Cordage	7	21	Lining	Metal-Tube Manufacture	15	13
Leather-measuring	Measuring-Instruments	17	23	Linotype-making	Linotyping	15	30
Leather-workers' hard-	Hardware-Making	77	13	Linotypes	do	4	30
ware				Liquid sterilizers	Stoves and Furnaces	15	19
Leaves	Bookbinding	174	5	Loading	Ordnance	22	22

## SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Loading and unloading ..	Hoisting .....	74	12	Locomotives—			
Loading and unloading—				Telescoping pilots .....	Railway Rolling-Stock .....	11	34
Hay .....	.....do .....	75	12	Traction-increasers .....	.....do .....	29	34
Hoist and dump .....	.....do .....	24	13	Traction-increasers—			
Hoist, raised track, and	.....do .....	54	12	Electric .....	.....do .....	11	34
dump .....				Gripping-drivers .....	.....do .....	11	34
Load-hinders .....	.....do .....	37	12	Logging .....	Railways .....	28	4
Pilers .....	.....do .....	59	12	Log-turners .....	Wood-Sawing .....	129	29
Raised track .....	.....do .....	52	12	Looms—			
Raised track—				Bag .....	Weaving .....	18	21
Track-end dump .....	.....do .....	28	12	Basket .....	.....do .....	6	21
Track-end dump—				Buttonhole .....	.....do .....	5	21
Tilting track-section.	.....do .....	26	12	Circular .....	.....do .....	44	21
Shoveling devices .....	.....do .....	84	12	Hair-cloth .....	.....do .....	33	21
Tilting platform .....	.....do .....	90	12	Hand .....	.....do .....	82	21
Vertical hoist and dump	.....do .....	124	12	Irregular .....	.....do .....	8	21
Load-regulated .....	Railway-Brakes .....	33	34	Lappet .....	.....do .....	10	21
Loam-receptacles .....	Coin-Controlled Apparatus .....	29	14	Looms .....	.....do .....	291	21
Lockets .....	Jewelry .....	57	5	Narrow-ware .....	.....do .....	38	21
Lock-strikes .....	Locks and Latches .....	47	20	Needle .....	.....do .....	31	21
Lock-strikes—				Pile-fabric—			
Electric .....	.....do .....	29	20	Longitudinal wires .....	.....do .....	7	21
Lock-trimmings .....	.....do .....	137	20	Pile-fabric .....	.....do .....	82	21
Locks .....	Firearms .....	253	22	Pile-wire motions .....	.....do .....	45	21
Locks .....	Locks and Latches .....	118	20	Pile-wires .....	.....do .....	14	21
Locks .....	Ordnance .....	29	22	Terry .....	.....do .....	17	21
Locks .....	Velocipedes .....	15	7	Tufted .....	.....do .....	40	21
Locks—				Slat, cane, and straw .....	.....do .....	43	21
Alarm .....	Locks and Latches .....	96	20	Swivel .....	.....do .....	32	21
Alarm—				Wire .....	.....do .....	22	21
Detonating .....	.....do .....	13	20	Lozenge-machines .....	Bread, Cracker, and Lozenge	47	15
Bag .....	.....do .....	68	20		Making .....		
Bicycle .....	.....do .....	25	20	Lubricants .....	Metal-Drawing .....	23	13
Car-seat .....	.....do .....	22	20	Lubricants .....	Oils, Fats, and Glue .....	220	31
Cylinder .....	.....do .....	158	20	Lubricating .....	Projectiles .....	8	22
Cylinder—				Lubricators .....	Steam-Engines .....	69	18
Knob .....	.....do .....	34	20	Lubricators—			
Multiple-key .....	.....do .....	16	20	Capillary attraction .....	Lubricators .....	45	2
Electric .....	.....do .....	45	20	Condensation displacement.	.....do .....	341	2
Electric—				Force-feed .....	.....do .....	332	2
Combination .....	.....do .....	20	20	Gravity-feed .....	.....do .....	428	2
Time .....	.....do .....	11	20	Gravity-feed—			
For pedals .....	Music .....	11	5	Automatic cut-off .....	.....do .....	116	2
Hasp .....	Locks and Latches .....	72	20	Liquefiers .....	.....do .....	40	2
Indicator .....	.....do .....	28	20	Miscellaneous .....	.....do .....	107	2
Multiple-bolt .....	.....do .....	26	20	Luggage-carriers .....	Velocipedes .....	58	7
Multiple-key .....	.....do .....	7	20	Lumber-wagons .....	Carriages and Wagons .....	48	10
Multiple-key—				Machine attachments .....	Linotyping .....	5	30
Adjustable tumbler .....	.....do .....	16	20	Machine-brakes .....	Machine Elements .....	315	12
Master-key .....	.....do .....	17	20	Machine-brakes—			
Primary and secondary	.....do .....	11	20	Strap .....	.....do .....	35	12
key .....				Machine-guns .....	Ordnance .....	148	22
Trap .....	.....do .....	10	20	Machine-needles .....	Needles and Pins .....	99	13
Piano .....	.....do .....	44	20	iug .....			
Pin .....	.....do .....	53	20	Machines .....	Leather-Working Machinery.	22	11
Pin—					Caoutchouc and Minor Plastics.	47	15
Multiple-key .....	.....do .....	13	20	Machines for coating .....			
Pivoted-tumbler .....	.....do .....	120	20	Machine-tables .....	Woodworking-Machines .....	91	29
Seal .....	.....do .....	209	20	Magic lanterns .....	Optics .....	72	30
Seal—				Magnetic clutch	Railway-Brakes .....		34
Seals .....	.....do .....	18	20	(See Electric.)			
Sliding-door .....	.....do .....	49	20	Magneto-electric—			
Sliding-tumbler .....	.....do .....	51	20	Armatures—			
Systems of locks .....	.....do .....	7	20	Disk .....	Electricity. Generation .....	23	26
Till .....	.....do .....	14	20	Drum .....	.....do .....	182	26
Time .....	.....do .....	146	20	Pole .....	.....do .....	18	26
Trunk .....	.....do .....	72	20	Ring .....	.....do .....	196	26
Trunk—				Bipolar .....	.....do .....	259	26
Swinging-hasp .....	.....do .....	63	20	Brushes and holders .....	.....do .....	134	26
Tumbler and dog .....	.....do .....	41	20	Commutators and collectors.	.....do .....	136	26
Without tumblers .....	.....do .....	55	20	Connecting devices .....	.....do .....	35	26
Locks and latches combined.	.....do .....	263	20	Hand-machines .....	.....do .....	85	26
Locomotive .....	Steam-Engines .....	107	18	Multipolar .....	.....do .....	224	26
Locomotive—				Uniform field .....	.....do .....	26	26
Connected series .....	Railway-Brakes .....	21	34	Mail-bag delivery—			
Locomotives .....	Railway Rolling-Stock .....	111	34	Car-forks .....	Railway Rolling-Stock .....	27	34
Locomotives—				Catchers and cranes .....	.....do .....	70	34
Belt-gearing .....	.....do .....	63	34	Cranes .....	.....do .....	33	34
Draw-bar lifters .....	.....do .....	11	34	Mail-bags .....	Packing and Storing Vessels	15	32
Electric—				Mail-bags—			
Belt-gearing .....	.....do .....	11	34	Closures .....	.....do .....	33	32
Friction-roller driven	.....do .....	12	34	Closures—			
Geared .....	.....do .....	20	34	Angular frame .....	.....do .....	48	32
Intermittent-grip .....	.....do .....	8	34	Flap .....	.....do .....	43	32
Longitudinal gear-	.....do .....	15	34	Flap—			
shafts .....				Corner folds .....	.....do .....	11	32
Longitudinal worm-	.....do .....	8	34	Sliding fastener .....	.....do .....	44	32
shafts .....				Turning fastener .....	.....do .....	17	32
Friction-roller driven	Railway-Brakes .....	24	34	Pivoted-jaw .....	.....do .....	13	32
Shoes between drivers	Railway Rolling-Stock .....	41	34	Top slide .....	.....do .....	10	32
Intermittent-grip .....	.....do .....	7	34	Label-holders .....	.....do .....	26	32
Longitudinal shafts .....	.....do .....	22	34	Mail-marking machines .....	Printing .....	14	17
Rack-rail .....	.....do .....	8	34	Mail-marking machines—			
Side-track push-rods .....	Railway Draft Appliances .....	6	34	Rotary .....	.....do .....	39	17
Swinging bogie .....	Railway Rolling-Stock .....	40	34				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Mail-marking machines— Rotary machines and stackers.	Printing.....	21	17	Mechanical printing.....	Photography.....	87	6
Mains and pipes.....	Water-Distribution.....	362	9	Mechanical puddlers.....	Metallurgy.....	41	3
Mallets.....	Woodworking-Tools.....	29	29	Mechanical puddlers— Rotary hearths.....	.....do.....	17	3
Malting apparatus.....	Alcohol.....	46	31	Tools.....	.....do.....	20	3
Malting apparatus— Cylinders, rotary.....	.....do.....	20	31	Mechanical telephones.....	Acoustics.....	175	23
Malt-stirrers.....	.....do.....	23	31	Mechanical treatment.....	Sewerage.....	14	9
Malting processes.....	.....do.....	13	31	Medals.....	Fine Arts.....	2	5
Mandrels.....	Metal-Tube Manufacture.....	31	13	Medical and surgical.....	Electricity. Medical and Surgical.....	29	26
Mandrels and work-hold- ers.	Metal Turning, Planing, and Milling.....	142	13	Medical spoons.....	Surgery.....	27	6
Mangles.....	Laundry.....	84	27	Metal— Card-grinding.....	Grinding and Polishing.....	71	27
Manholes.....	Steam-Boilers.....	30	18	Curved surfaces.....	.....do.....	246	27
Manholes and catch-ba- sins.	Sewerage.....	119	9	Cutlery-scourers.....	.....do.....	170	27
Mantels.....	Carpentry.....	25	29	Edge-tools.....	.....do.....	432	27
Mauve-forks.....	Harvesters.....	38	7	Metallic.....	Roofing.....	130	29
Mauve-pouches.....	Care of Live Stock.....	13	2	Metallic— Sheathing.....	Iron Structures.....	107	4
Many-spindle lathes.....	Wood-Turning.....	31	29	Shingle.....	Roofing.....	138	29
Maps.....	Educational Appliances.....	35	31	Standing-seam.....	.....do.....	78	29
Marine torpedoes.....	Projectiles.....	44	22	Vessels— Boxes.....	Packing and Storing Vessels.....	88	32
Marine ways.....	Hydraulic Engineering.....	32	7	Boxes— Bleaching.....	.....do.....	45	32
Marking-machines.....	Printing.....	61	14	Compartment.....	.....do.....	46	32
Marking-machines— Rotary.....	.....do.....	43	17	Knockdown.....	.....do.....	34	32
Marquetry.....	Carpentry.....	54	29	Pocket.....	.....do.....	61	32
Mashing.....	Alcohol.....	9	31	Canisters.....	.....do.....	118	32
Apparatus.....	.....do.....	46	31	Cans and unclassified vessels.....	.....do.....	227	32
Apparatus— Digesters and disin- tegrators.....	.....do.....	18	31	Cans and unclassified vessels— Single-blank.....	.....do.....	26	32
Fore-mashers.....	.....do.....	30	31	Casks.....	.....do.....	66	32
Mash-tubs.....	.....do.....	50	31	Closures.....	.....do.....	123	32
Mash-tubs— Rakes.....	.....do.....	22	31	Closures— Clamp.....	.....do.....	72	32
Tubular rakes.....	.....do.....	22	31	Screw-cap.....	.....do.....	29	32
Hops.....	.....do.....	80	31	Screw-stopper.....	.....do.....	21	32
Processes.....	.....do.....	4	31	Seam or solder.....	.....do.....	152	32
Wort.....	.....do.....	22	31	Seam or solder— Rip.....	.....do.....	106	32
Hopping.....	.....do.....	17	31	Swing-cover.....	.....do.....	29	32
Purifying.....	.....do.....	144	22	Coal-scuttles.....	.....do.....	170	32
Masts and spars.....	Ships.....	61	30	Ears and bails.....	.....do.....	126	32
Match-boxes— Igniting.....	Lamps and Gas-Fittings.....	31	30	Garbage-receptacles.....	.....do.....	45	32
Single-delivery.....	.....do.....	61	6	Garbage-receptacles— Bucket.....	.....do.....	53	32
Matches.....	Explosives.....	120	30	Pivoted.....	.....do.....	21	32
Match-safes.....	Lamps and Gas-Fittings.....	64	29	Handles.....	.....do.....	55	32
Match-splints.....	Woodworking-Machines.....	87	29	Hermetic sealing.....	.....do.....	57	32
Match-trays.....	.....do.....	79	15	Jackets.....	.....do.....	109	32
Materials.....	Paper-Making.....	14	20	Jackets— Cask.....	.....do.....	18	32
Matrices.....	Dentistry.....	88	29	Package.....	.....do.....	59	32
Mats.....	Carpentry.....	27	29	Stand.....	.....do.....	16	32
Mats— Metallic.....	.....do.....	40	29	Jackets and stands.....	.....do.....	66	32
Wire.....	.....do.....	86	8	Swing Linings.....	.....do.....	30	32
Mattresses.....	Beds.....	60	23	Milk-cans.....	.....do.....	160	32
Measures— Rotary.....	Measuring-Instruments.....	130	23	Nozzles and vents.....	.....do.....	43	32
Scale.....	.....do.....	19	23	Nozzles and vents— Screw.....	.....do.....	19	32
Shoemakers'.....	.....do.....	157	23	Screw-cap.....	.....do.....	47	32
Speed.....	.....do.....	76	23	Valve.....	.....do.....	61	32
Tailors'.....	.....do.....	174	23	Valve-screw.....	.....do.....	71	32
Tape.....	.....do.....	42	23	Paint-tubes, collapsi- ble.....	.....do.....	11	32
Measuring-fancets.....	.....do.....	21	25	Spouted.....	.....do.....	127	32
Measuring-pumps.....	.....do.....	3	25	Spouted— Feeders.....	.....do.....	273	32
Measuring-vessels.....	.....do.....	116	25	Feeders— Piston.....	.....do.....	42	32
Meat-clamps.....	Butchering.....	23	25	Storage.....	.....do.....	63	32
Meat-cutters— Cracklings.....	.....do.....	44	25	Transport.....	.....do.....	68	32
Crank mechanism.....	.....do.....	153	25	Vessels, baskets, and crates.....	.....do.....	45	32
Cube.....	.....do.....	11	25	Metalloids.....	Chemicals.....	136	6
Cylinder and block.....	.....do.....	43	25	Metal molds— Apparatus and plants.....	Metal-Founding.....	35	3
Cylinder and concave.....	.....do.....	25	25	Chains, hinges, and joints.....	.....do.....	10	3
Double-cylinder.....	.....do.....	74	25	Hardware.....	.....do.....	68	3
Hand.....	.....do.....	42	25	Hollow ware.....	.....do.....	62	3
Rocking-knife.....	.....do.....	9	25	Ingots.....	.....do.....	86	3
Slicers.....	.....do.....	50	25	Ingots— Compound.....	.....do.....	123	3
Trip mechanism.....	.....do.....	17	25	Hollow and tube.....	.....do.....	34	3
Meat-mixers.....	.....do.....	55	25	Plants.....	.....do.....	118	3
Meat-tenderers— Hand.....	.....do.....	143	20	Strippers.....	.....do.....	15	3
Pivoted-head.....	.....do.....	573	2	Ladles.....	.....do.....	48	3
Rotary.....	.....do.....	46	2	Materials.....	.....do.....	25	3
Mechanical.....	Dentistry.....	151	2	Ordnance and project- iles.....	.....do.....	7	3
Mechanical.....	.....do.....	383	2	Pigs.....	.....do.....	10	3
Mechanical motors— Horse-powers.....	Mechanical Motors.....	196	2	Plows.....	.....do.....	7	3
Horse-powers— Equalizers.....	.....do.....	345	12				
Treads.....	.....do.....						
Mannual.....	.....do.....						
Miscellaneous.....	.....do.....						
Spring.....	.....do.....						
Weight.....	.....do.....						
Mechanical movements.....	Machine Elements.....						

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Metal molds—				Mitering-saw .....	Woodworking-Machines ...	185	29
Rolls .....	Metal-Founding .....	25	3	Mixed paints—			
Screw-threads .....	do .....	9	3	Alkali .....	Painting .....	110	31
Soft-metal machines .....	do .....	61	3	Barrel-linings .....	do .....	54	31
Soft-metal machines—				Oil .....	do .....	163	31
Molds .....	do .....	71	3	Rubber .....	do .....	69	31
Shot .....	do .....	4	3	Tar .....	do .....	87	31
Spoons .....	do .....	10	3	Vulcanized .....	do .....	26	31
Traps .....	do .....	27	3	Water .....	do .....	62	21
Type .....	do .....	39	3	Water—			
Tools .....	do .....	18	3	Solublesilicates .....	do .....	26	31
Vehicle-wheels .....	do .....	42	3	Mixers .....	Sugar and Salt .....	19	6
Wheels .....	do .....	10	3	Mixers and kneaders .....	Bread, Cracker, and Lozenge Making .....	178	15
Metal—				Moistening .....	Tobacco .....	67	2
Mower and reaper knives .....	Grinding and Polishing .....	199	27	Moldboards .....	Plows .....	140	1
Needle-eyes .....	do .....	20	27	Moldboards—			
Needles, rods, and joints .....	do .....	44	27	Revolving .....	do .....	62	1
Ornamentation .....	Fine Arts .....	128	5	Molded molds—			
Plane surfaces .....	Grinding and Polishing .....	177	27	Chains, hinges, and joints .....	Metal-Founding .....	17	3
Rumbles .....	do .....	32	27	Hardware .....	do .....	53	3
Screw-machines .....	Metal Bolts, Nuts, Rivets, and Screws .....	152	13	Hollow ware .....	do .....	118	3
Sheet metal and wire .....	Grinding and Polishing .....	41	27	Molded molds .....	do .....	18	3
Stock and ornamental wire fabric .....	Jewelry .....	28	5	Molders' flasks .....	do .....	90	3
Strops, bones, and rifles .....	Grinding and Polishing .....	195	27	Molders' materials .....	do .....	59	3
Metal-working, electric .....	Metal-Welding .....	245	13	Molders' tools and arts .....	do .....	140	3
Meters .....	Electricity. Generation .....	258	26	Ordinance and project- iles .....	do .....	10	3
Meters—				Pipe-elbows .....	do .....	25	3
Air and gas .....	Measuring-Instruments .....	152	23	Pipes .....	do .....	74	3
Diaphragm .....	do .....	58	23	Pipes—			
Disk .....	do .....	35	23	Horizontal .....	do .....	11	3
Oscillating .....	do .....	104	23	Plants .....	do .....	15	3
Piston .....	do .....	276	23	Plows .....	do .....	40	3
Proportional .....	do .....	64	23	Rolls .....	do .....	13	3
Rotary .....	do .....	242	23	Screw-threads .....	do .....	11	3
Spirit .....	do .....	18	23	Tools .....	do .....	14	3
Methods .....	Sewing-Machines .....	73	24	Vehicle-wheels .....	do .....	140	3
Metronomes .....	Horology .....	9	23	Wheels .....	do .....	55	3
Microscopes .....	Optics .....	58	30	Molding apparatus—			
Milk-cans .....	Packing and Storing Vessels .....	160	32	Blacking-molds .....	do .....	11	3
(See Metallic vessels, milk-cans.)				Hollow ware .....	do .....	20	3
Milk-coolers—				Machines .....	do .....	171	3
Aerating .....	Dairy .....	23	2	Ordinance and project- iles .....	do .....	4	3
Creaming-cans .....	do .....	236	2	Pipe-cores .....	do .....	59	3
Creaming-cans—				Pipes .....	do .....	78	3
Agitators .....	do .....	6	2	Pipes—			
Depending-tube .....	do .....	31	2	Horizontal .....	do .....	8	3
Floats .....	do .....	8	2	Screw-threads .....	do .....	16	3
Vacuum creamers .....	do .....	12	2	Vehicle-wheels .....	do .....	14	3
Vertical-tube .....	do .....	63	2	Wheels .....	do .....	34	3
Milk-circulation .....	do .....	65	2	Molding—			
Vats .....	do .....	20	2	Axles .....	Woodworking-Machines .....	17	29
Vats—				Cigars .....	Tobacco .....	144	2
Air-circulation .....	do .....	16	2	Clamped-work .....	Woodworking-Machines .....	89	29
Horizontal-tube .....	do .....	13	2	Devices .....	Caoutchouc and Minor Plas- tics .....	117	15
Removable-pipe .....	do .....	30	2	Hand-feed .....	Woodworking-Machines .....	69	29
Milk-stools .....	do .....	51	2	Lateral-feed .....	do .....	50	29
Mill appliances .....	Metal-Rolling .....	226	13	Machines and articles .....	Paper-Making .....	207	15
Milling .....	Metal Turning, Planing, and Milling .....	139	13	Pattern-feed .....	Woodworking-Machines .....	199	29
Milling-cutters .....	do .....	47	13	Special-feed .....	do .....	114	29
Mills—				Straight-feed .....	do .....	196	29
Auxiliary saw .....	Wood-Sawing .....	17	29	Moldings .....	Carpentry .....	60	29
Circular-saw .....	do .....	42	29	Molds .....	Artificial Stone, Lime, and Cement .....	127	15
Reciprocating-saw .....	do .....	232	29	Molds .....	Dentistry .....	64	20
Reciprocating-saw—				Molds .....	Glass .....	397	15
Scroll .....	do .....	231	29	Molds and carriages .....	Sugar and Salt .....	34	6
Millstone-dressing ma- chines .....	Stone-Working .....	170	25	Monuments .....	Stone-Working .....	111	25
Millstone paint-staffs .....	do .....	55	25	Mops .....	Brushing and Scrubbing .....	9	27
Millstone-picks .....	do .....	91	25	Mop-wringers .....	do .....	133	27
Mining .....	Hydraulic Engineering .....	21	4	Mordants .....	Bleaching and Dyeing .....	49	6
Mining machines .....	Stone-Working .....	379	25	Morse registers .....	Telegraphy .....	31	16
Mirrors .....	Furniture .....	62	8	Mortars .....	Ordnance .....	6	22
Mirrors—				Mortising—			
Bracket .....	do .....	27	8	Anger-cutters .....	Woodworking-Machines .....	62	29
Hand .....	do .....	42	8	Chisel and anger cut- ters .....	do .....	55	29
Multiple .....	do .....	52	8	Chisel-cutters .....	do .....	147	29
Stand .....	do .....	14	8	Rotary cutters .....	do .....	58	29
Window .....	do .....	26	8	Mosquito-nets and cano- pies .....	Beds .....	180	8
Miscellaneous .....	Acoustics .....	15	23	Motion of vessel .....	Marine Propulsion .....	12	22
Miscellaneous .....	Coin-Controlled Apparatus .....	23	14	Motor part along track .....	Electricity. Electric Rail- ways .....	19	26
Miscellaneous .....	Dentistry .....	39	20	Motors .....	Electricity. Motive-Power .....	346	26
Miscellaneous .....	Educational Appliances .....	51	31	Motors—			
Miscellaneous .....	Hardware-Making .....	139	13	Alternating .....	do .....	37	26
Miscellaneous .....	Matrix-Making .....	1	30	Alternating—			
Miscellaneous .....	Surgery .....	197	6	Condensers .....	do .....	17	26
Miscellaneous .....	Type-Writing Machines .....	12	30	Distorted field .....	do .....	18	26
Miscellaneous machines .....	Linotyping .....	5	30	Rotary field .....	do .....	34	26
Miscellaneous parts .....	Pumps .....	107	9	Starters .....	do .....	22	26
Miscellaneous parts .....	Sewing-Machines .....	141	24	For elevators .....	Hydraulic Motors .....	432	9
Mitering-knife .....	Woodworking-Machines .....	66	29				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
<b>Motors—</b>				<b>Nuts and washers—</b>			
For jacks	Hydraulic Motors	52	9	Making	Metal Bolts, Nuts, Rivets, and Screws.	257	13
For presses	do	180	9	Nut-wrenches—			
Hand-operating devices	Electricity. Motive-Power.	155	26	Pivoted and spring jaw	Metal-Working Tools	73	14
Manually-operated	Railway Rolling-Stock	17	34	Ratchet-wheel	do	166	14
Mechanical, miscellaneous.	Mechanical Motors	151	2	Rigid-jaw	do	35	14
Reciprocating	Electricity. Motive-Power.	126	26	Rigid-socket and axle- nut.	do	85	14
Spring	Railway Rolling-Stock	16	34	Sliding-jaw	do	696	14
Tread-power	do	7	34	Wheel	do	59	14
Motor-vehicles	Carriages and Wagons	34	10	Oakum-machines	Brakes and Gins	10	21
Mounting	Photography	22	6	Oars and oar-locks	Boats	230	22
Month-mirrors	Dentistry	8	22	Obstetrics	Surgery	36	6
Monthpieces	Music	23	5	Obtundors	Dentistry	14	20
Mouthpieces	Tobacco	108	2	Odometers	Measuring-Instruments	101	23
Movement cure	Surgery	46	6	Oil	Gas	102	31
<b>Mowers—</b>				Oil	Pumps	62	9
Anomalies	Harvesters	31	7	Oil and water	Gas	30	31
Center-cut	do	104	7	Oil and water—			
Front-cut—				Generators—			
One wheel	do	60	7	Cupola	do	142	31
Two wheels	do	435	7	Refractory	do	30	31
Lawn	do	293	7	Retort	do	208	31
Rear-cut—				Oil-dispensing tanks	Packaging and Dispensing Liquids.	29	32
One wheel	do	63	7				
Two wheels	do	269	7	Oil-dispensing tanks—			
Reciprocating gear	do	153	7	Cabinet	do	14	32
Thrust-cut	do	86	7	Drainers	do	18	32
Mud guards. Dress and	Velocipedes	22	7	Drainers—			
Muffs and mufflers.	Apparel	172	24	Pumps	do	35	32
Mules and jacks	Spinning	304	21	Pumps—			
Multicolor-machines	Printing	17	17	Inclosed	do	51	32
Multicolor-machines—				Followers	do	31	32
Bed and cylinder	do	11	17	Nozzles—			
Bed and cylinder—				Pivoted	do	7	32
Multiple impression	do	18	17	Suction	do	6	32
Bed and plate	do	53	17	Vent	do	6	32
Rotary	do	45	17	Pressure	do	5	32
Rotary—				Pressure—			
Multiple printing	do	29	17	Blow	do	10	32
couple.				Bulb	do	16	32
Supplemental forms	do	22	17	Piston	do	16	32
Multiple-cylinder	Steam-Engines	243	18	Pump	do	17	32
Multiple-piston	do	59	18	Siphon	do	3	32
Multiplex	Telegraphy	82	16	Oil-distributors	Ships	28	22
Musical blocks	Music	8	5	Oil indicators and fillers	Lamps and Gas-Fittings	55	30
Musical-instrument work	Hardware-Making	21	13	Olivers	Metal-Forging	50	13
Music-boxes	Coin-Controlled Apparatus	7	14	Opener-beaters	Carding	17	21
Musicians' cases	Baggage	22	32	Opener-eveeing mechan- ism.	do	22	21
Mustache-guards	Toilet	39	24				
Mutes. Dampers and—				Open rats	Bleaching and Dyeing	212	6
Violin	Mosic	33	5	Opera-glasses	Coin-Controlled Apparatus	6	14
Muzzle-loaders	Firearms	23	22	Opera-glasses	Optics	54	30
Nail and ear cleaners	Toilet	45	24	Operative	Ordnance	213	22
Nail-distributors	Nails and Spikes	41	13	Optometers	Dentistry	20	20
Nail-extractors—				Ore and coal—	Optics	49	30
Claw	Woodworking-Tools	109	29	Coal-breakers	Mills	56	25
Nipper	do	142	29	Coal-breakers	Crushers	217	25
Nail-heads, ornamental	Nails and Spikes	69	13	Ice-crushers	do	32	25
Nail-plate feeders	do	163	13	Ice picks and shavers	do	83	25
Nails and spikes	do	289	13	Separators—			
Napkin-holders	Kitchen and Table Articles	15	8	Dry	do	210	25
Napkin-supporters	Clasps, Buckles, and Buttons	75	11	Jiggers	do	99	25
Napping	Cloth-Finishing	102	21	Magnetic	do	171	25
Nasal douches	Surgery	13	6	Washers	do	799	25
Nautical signals	Signals	40	22	Sifters and screens	do	302	25
Necktie-fasteners	Clasps, Buckles, and Buttons	506	11	Stamps	do	207	25
Neckties	Apparel	209	24	Ore-detectors	Electricity. Special Appli- cations.	9	16
Neck-yokes	Carriages and Wagons	252	10				
Needle-clamps	Sewing-Machines	40	24	Organ-actions	Music	65	5
Needle holders and cases	Surgery	18	6	Organ-actions—			
Needles	Apparel	62	24	Electropneumatic	do	6	5
Needles	Knitting and Netting	65	21	Pneumatic	do	66	5
Needles	Sewing-Machines	70	24	Organ and piano, com- bined.	do	22	5
Needle-threaders	Apparel	27	24	Organ-bellows	do	48	5
Nether garments	do	339	24	Organ-cases	do	59	5
Netting	Knitting and Netting	36	21	Organic	Fertilizers	64	6
Newspaper-files	Bookbinding	119	5	Organ-pipes	Music	19	5
Nippers	Metal-Working Tools	71	14	Organs—			
Nipples	Surgery	34	6	Pedal-bass	do	6	5
Nipples and guards	Firearms	17	22	Pipe	do	35	5
Nitro compounds	Explosives	195	6	Reed	do	148	5
Nose-rings and ring- ing-tools.	Care of Live Stock	112	2	Reed—			
Notation	Music	25	5	With pipes	do	18	5
Note-sheets for self-play- ing instruments.	do	17	5	Steam	do	4	5
Nozzles	Water-Distribution	328	9	Organ stop-actions	do	76	5
Numbering-machines	Printing	89	17	Organ-swells	do	30	5
Numbering-machines—				Organ wind-chests	do	3	5
Form attachment	do	27	17	Ornamental chains	Jewelry	166	5
Hands	do	21	17	Ornamental chains	Metal Personal Wear. Mak- ing	40	14
Measurers and markers	do	15	17	Ornamental wire fabric, &c.	Jewelry	28	5
Nursing-bottles	Surgery	64	6	Ornamentation	Glass	280	15
Nut-crackers	Vegetable Cutters and Crush- ers.	35	25	Ornamentation—			
Nuts and washers	Metal Bolts, Nuts, Rivets, and Screws.	57	13	Metal	Fine Arts	128	5

## SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Ornamenting .....	Metal-Ornamenting .....	22	14	Paper-damping ma-			
Ornamenting .....	Paper-Making .....	106	15	chines—			
Ornamenting cloth .....	Fine Arts .....	76	5	Winders .....	Printing .....	24	17
Oscillating .....	Hydraulic Motors .....	69	9	Paper-fasteners .....	Clasps, Buckles, and Buttons .....	150	11
Oscillating .....	Pumps .....	76	9	Paper-hanging machines .....	Paper-Making .....	62	15
Oscillating .....	Steam-Engines .....	187	18	Paper-making machines .....	do .....	310	15
Oscillating propellers .....	Marine Propulsion .....	99	22	Paper vessels—			
Osier-peelers .....	Woodworking-Machines .....	15	29	Bags .....	Packing and Storing Vessels .....	35	32
Oval forms .....	Wood-Turning .....	38	29	Bags—			
Ovens—				Closures .....	do .....	54	32
Bakers' .....	Stoves and Furnaces .....	205	19	Square-bottom .....	do .....	119	32
Domestic .....	do .....	228	19	Barrels .....	do .....	38	32
Overcoming dead-centers .....	Machine Elements .....	51	12	Boxes—			
Ox-yokes .....	Harness .....	75	11	Curved .....	do .....	102	32
Oyster-culture .....	Fishing and Trapping .....	9	22	Curved—			
(See Fishing, oyster-				Compartment .....	do .....	14	32
culture.)				Pails .....	do .....	27	32
Oyster-dredges .....	do .....	28	22	Paper-weights .....	Stationery .....	28	5
(See Fishing, oyster-				Paraffine .....	Mineral Oils .....	55	21
dredges.)				Parallel-rulers .....	Drafting .....	86	23
Oyster-openers .....	Kitchen and Table Articles .....	30	8	Parciment .....	Paper-Making .....	25	15
Oyster rakes and tongs .....	Fishing and Trapping .....	18	22	Partitions, Sidings and—			
(See Fishing, oyster				Concrete .....	Fireproof Buildings .....	23	4
rakes and tongs.)				Tile .....	do .....	15	4
Package-carriers .....	Baggage .....	32	32	Passenger-cars .....	Railway Rolling-Stock .....	76	34
Package-handles .....	do .....	30	32	(See Cars, passenger.)			
Packaging braid and	Corlage .....	13	21	Pastry-boards .....	Bread, Cracker, and Lozenge	23	15
yarn .....					Making .....		
Packing .....	Tobacco .....	47	2	Pattern-chains .....	Weaving .....	22	21
Packing .....				Pattern-exhibitors .....	Advertising .....	25	32
Chemicals .....	Chemicals .....	67	6	Paving-tiles .....	Clay and Pottery .....	82	15
Compound and textile .....	Steam-Engines .....	165	18	Paving-tools .....	Paving .....	92	15
Furniture .....	Furniture .....	13	8	Pawls and ratchets .....	Machine Elements .....	179	12
Paddle-wheels—				Peaf-machines .....	Fuel .....	143	15
Feathering-blades .....	Marine Propulsion .....	191	22	Pedal-bass organs .....	Music .....	6	5
Fitting and driving .....	do .....	108	22	Pedal piano-actions .....	do .....	10	5
Form and construction .....	do .....	122	22	Pedals .....	do .....	35	5
Padlocks .....	Locks and Latches .....	29	20	Pedals—			
Padlocks—				Auxiliary .....	do .....	33	5
Alarm .....	do .....	3	20	Guards .....	do .....	14	5
Divided-shackle .....	do .....	9	20	Locks .....	do .....	11	5
Indicator .....	do .....	11	20	Pedals and cranks .....	Velocipedes .....	103	7
Indicator—				Pedestals .....	Lamps and Gas-Fittings .....	52	30
Pivoted-shackle .....	do .....	37	20	Pedestals .....	Railway Rolling-Stock .....	67	34
Permutation .....	do .....	42	20	(See Trucks.)			
Permutation—				Peelers and mashers .....	Vegetable Cutters and Crush-	73	25
Pivoted-shackle .....	do .....	41	20		ers .....		
Sliding-shackle .....	do .....	48	20	Peg-floats .....	Boots and Shoes .....	78	11
Pin .....	do .....	11	20	Pegging-jacks .....	do .....	270	11
Pivoted-shackle .....	do .....	111	20	Pegging-machines—			
Pivoted-shackle—				Nails and pegs .....	do .....	500	11
Sliding-bolt .....	do .....	68	20	Wire .....	do .....	400	11
Rotating-shackle .....	do .....	16	20	Pegs .....	do .....	220	11
Seal .....	do .....	102	20	Pen and pencil cases .....	Stationery .....	155	5
Sliding-shackle .....	do .....	73	20	Pencil-cases .....	do .....	155	5
Pads .....	Crimoline and Corsets .....	63	24	Pencil-clasps .....	do .....	95	5
Pails .....	Packing and Storing Vessels .....	27	32	Pencils .....	do .....	137	5
(See Paper vessels,				Pencil-sharpener .....	do .....	294	5
pails.)				Pencil-wood, Making .....	Woodworking-Machines .....	11	29
Pails and strainers .....	Dairy .....	159	2	Pen-clearers .....	Stationery .....	80	5
Paint-breamers .....	Stoves and Furnaces .....	27	19	Pendulum-escapements .....	Horology .....	56	23
Painting, decorative .....	Fine Arts .....	3	5	Pendulums .....	do .....	103	23
Paint-mixers .....	Painting .....	39	31	Penholders .....	Stationery .....	241	5
Paint-tubes, collapsible .....	Packing and Storing Vessels .....	11	32	Peumanship .....	Educational Appliances .....	79	31
(See Metallic vessels,				Pen racks and cleavers .....	Stationery .....	80	5
paint-tubes, collapsi-				Pens .....	do .....	161	5
ble.)				Pens—			
Pan and boiler .....	Driers .....	73	28	Fountain .....	do .....	333	5
Pan and scraper .....	do .....	99	28	Pencils and holders .....	Sheet-Metal Ware, Making .....	11	14
Panels and wainscoting .....	Carpentry .....	43	29	Stylographic .....	Stationery .....	79	5
Panification .....	Preserving .....	120	6	Perforated rolls and	Bleaching and Dyeing .....	58	6
Pans .....	Driers .....	24	28	spray-jets .....			
Pans—				Perforating .....	Telegraphy .....	18	16
Ash .....	Stoves and Furnaces .....	59	19	Perforating and lace pa-	Paper-Manufactures .....	154	17
Bake .....	do .....	205	19	per .....			
Frying .....	do .....	97	19	Perforators .....	Printing .....	23	17
Pantographs .....	Drafting .....	30	23	(See Hand-stamps, per-			
Paper-board .....	Paper-Making .....	122	15	forators.)			
Paper boxes—				Permutation-locks .....	Locks and Latches .....	46	20
Angular .....	Packing and Storing Vessels .....	95	32	Permutation-locks—			
Angular—				Dials .....	do .....	13	20
Blanks, plural .....	do .....	45	32	Hasp .....	do .....	16	20
Compartment .....	do .....	76	32	Keyhole-guards .....	do .....	7	20
Compartment—				Knob-pins .....	do .....	8	20
Folded .....	do .....	25	32	Operating-handle .....	do .....	5	20
End folds .....	do .....	46	32	Push pin .....	do .....	36	20
End laps .....	do .....	148	32	Rotating tumblers .....	do .....	427	20
Side and end folds .....	do .....	18	32	Sliding tumblers .....	do .....	17	20
Side and end laps .....	do .....	67	32	Spindles .....	do .....	23	20
Side folds .....	do .....	31	32	Tilt-locks .....	do .....	60	20
Side folds and end	do .....	20	32	Personal wear .....	Metal Personal Wear, Mak-	134	14
laps .....					ing .....		
Side laps .....	do .....	77	32	Pessaries .....	Surgery .....	131	6
Slide .....	do .....	55	32	Pharmaceutical .....	do .....	58	6
Stays .....	do .....	20	32	Photographs .....	Coin-Controlled Apparatus .....	21	14
Paper-clips .....	Stationery .....	240	5	Phosphates .....	Fertilizers .....	100	6
Paper-damping machines .....	Printing .....	18	17	Photographic .....	Coin-Controlled Apparatus .....	13	14

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Photometers .....	Optics	16	30	Pipe-wrenches—	Metal-Working Tools	158	14
Photosculpture .....	Photography	3	6	Sliding-jaw .....	.....do	30	14
Pianissimo devices .....	Music	49	5	Sliding-jaw—	Firearms	11	22
Piano-actions .....	.....do	303	5	With cutter .....	Fluid-Pressure Regulators	163	31
Piano-actions—				Pistol-swords .....	Steam-Engine Valves	81	18
Dampers .....	.....do	16	5	Piston .....	Steam-Engines	400	12
Flanges .....	.....do	20	5	Piston-packing, metallic	Pumps	189	9
Frames .....	.....do	21	5	Pistons .....	Steam-Engines	26	18
Hammers .....	.....do	20	5	Pitch-boards .....	Measuring-Instruments	37	23
Pedal .....	.....do	10	5	Pitchers .....	Kitchen and Table Articles	223	8
Plectrum .....	.....do	7	5	Pitchers—	.....do	22	8
Pianoagrafes and bridges	.....do	95	5	Tilting-frame .....	Tools and Implements	24	13
Piano attachments .....	.....do	23	5	Pitchforks .....	Making		
Piano-cases .....	.....do	72	5	Pitching casks .....	Washing Apparatus	29	27
Piano-frames .....	.....do	57	5	Pitmen .....	Machine Elements	370	12
Piano-legs .....	.....do	3	5	Pitters, corers, and eye-	Vegetable Cutters and Crush-	91	25
Pianos .....	.....do	100	5	cutters.	Seeders and Planters	18	1
Pianos—				Pivoted seed-cups .....	Harrows and Diggers	103	1
Sostenuto .....	.....do	27	5	Pivoted teeth .....	.....do	164	1
Violin .....	.....do	15	5	Pivoted tooth-bars .....	Apparel	129	24
Without strings .....	.....do	54	5	Plating .....	Woodworking-Machines	31	29
Piano sounding-boards .....	.....do	67	5	Planer attachments .....	Metal Turning, Planing, and	31	13
Piano-stringing .....	.....do	37	5	Planer-chucks .....	Milling.		
Piano tuning-pins .....	.....do	20	5	Planers—	Woodworking-Machines	29	29
Piano tuning-pins—				Beveling .....	Metal Turning, Planing, and	155	13
Coupling-clamp .....	.....do	14	5	Reciprocating bed or	Milling.		
Direct-pull .....	.....do	32	5	cutter.	Woodworking-Machines	114	29
Lever .....	.....do	13	5	Rotary-cylinder .....	.....do	50	29
Presser-deflectors .....	.....do	11	5	Rotary-disk .....	Metal Turning, Planing, and	13	13
Push-rod and carrier .....	.....do	9	5	Rotating bed or cutters	Milling.		
Worm-gear .....	.....do	6	5	Sliding .....	Woodworking-Machines	68	29
Picker-checks .....	Weaving	58	21	Planimeters .....	Measuring-Instruments	8	23
Pickers .....	Carding	256	21	Planing and matching .....	Woodworking-Machines	122	29
Pickers .....	Weaving	71	21	Planing and sawing .....	.....do	32	29
Picking and swilling .....	Coating with Metal	36	3	Planographic machines	Printing	31	17
Picks and mattocks .....	Tools and Implements	37	13	Planographic machines—			
	Making			Bed and cylinder .....	.....do	25	17
Picks for zithers .....	Music	4	5	Rotary .....	.....do	18	17
Picture-frames .....	Fine Arts	228	5	Planters—	Seeders and Planters	1770	1
Picture-hangers .....	Furniture	31	8	Corn .....	.....do	354	1
Picture-hangers—				Cotton .....	.....do	8	1
Adjustable .....	.....do	58	8	Foot .....	.....do	22	1
Pictures .....	Fine Arts	55	5	Hand .....	.....do	78	1
Pictures .....	Photography	25	6	Hand—	.....do	270	1
Picture-stands .....	Fine Arts	72	5	Oscillating .....	.....do	30	1
Pie crimpers and trim-	Bread, Cracker, and Lozenge	17	15	Reciprocating .....	.....do	121	1
mers .....	Making.			Rotating .....	.....do	37	1
Piers, bridges .....	Bridges	53	4	Potato .....	.....do	1167	1
Pigments .....	Painting	69	31	Potato—	Walking		
Pile-drivers .....	Hydraulic Engineering	18	4	Walking .....	Vibrating hoppers	68	1
Pile-drivers—				Walking .....	Plant frames and houses	26	1
Jigs .....	.....do	10	4	Vibrating hoppers	.....do	33	1
Monkey .....	.....do	125	4	Plant-stands—	.....do	35	1
Piston .....	.....do	18	4	Revolving .....	Artificial Stone, Lime, and	73	15
Sinking .....	.....do	20	4	Plastering .....	Cement.		
Swinging-hammer .....	.....do	11	4	Fiber .....	.....do	46	15
Piles .....				Implements .....	.....do	103	15
Metallic .....	.....do	31	4	Retarders .....	Medicines	77	6
Protected .....	.....do	41	4	Plasters	Caoutchouc and Minor Plas-	155	15
Pill-machines .....	Caoutchouc and Minor Plas-	103	15	Plastics, minor composi-	tics.		
	tics.			tions.	Artificial Limbs	8	20
Pillows .....	Beds	75	8	Plastic splints .....	Printing	7	17
Pillow-sham holders .....	.....do	89	8	Plate .....	Type-Writing Machines	63	30
Pin and needle cases .....	Apparel	96	24	Plate and window	Glass	68	15
Pinch-bars .....	Railway Rolling-Stock	17	34	Plate-holders	Photography	80	6
(See Car-movers.)				Plate-holders—	.....do	46	6
Pinking .....	Apparel	10	24	Magazine .....	Kitchen and Table Articles	65	8
Pins .....	Toilet	170	24	Plate-lifters	Plate-machines—		
Pins, Making .....	Needles and Pins	17	13	Bed and cylinder .....	Printing	35	17
Pins, Papering .....	.....do	43	13	Bed and platen .....	.....do	14	17
Pipe-cleaners .....	Tobacco	7	2	Rotary .....	.....do	8	17
Pipe-couplings .....	Railway-Brakes	8	34	Traveling-bed .....	.....do	15	17
(See Fluid-pressure				Plates and bars .....	Metal-Rolling	198	13
train-pipe couplings.)				Platform adjustments .....	Harvesters	175	7
Pipe-couplings—				Platforms .....	Stoves and Furnaces	88	19
Detachable .....	Water-Distribution	730	9	Playing-cards .....	Games and Toys	57	7
Detachable and flexible	.....do	366	9	Pleasure-railways	Railways	72	4
Permanent .....	.....do	187	9	Plectrum, piano-actions	Music	7	5
Valved .....	.....do	146	9	Pliers .....	Metal-Working Tools	96	14
Pipe-cutters—				Pliers—			
Inside .....	Metal-Working Tools	62	14	Rod and bolt cutters	.....do	100	14
Outside .....	.....do	116	14	Smiths' tongs .....	.....do	34	14
Pipe-expanders .....	.....do	178	14	Plotters .....	Drafting	81	23
Pipe-hangers .....	Stoves and Furnaces	66	19	Plow-irons .....	Tools and Implements	104	13
Pipe-organs .....	Music	35	5	Making			
Pipes and stems .....	Tobacco	265	2				
Pipes—							
On reed-organs .....	Music	18	5				
Organ .....	.....do	19	5				
Soap-hubble .....	Games and Toys	17	7				
Pipe-wrenches—							
Chain .....	Metal-Working Tools	75	14				
Expanding-jaw .....	.....do	27	14				
Pivoted-jaw .....	.....do	471	14				
Pivoted-jaw—							
With cutter .....	.....do	30	14				
Rigid-jaw and spanner	.....do	36	14				



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Plows .....	Plows .....	907	1	Potash. Soda and .....	Chemicals .....	189	6
Plows—				Potato-diggers .....	Harrows and Diggers .....	66	1
Ditching .....	do .....	157	1	Potato-diggers—			
Mole .....	do .....	136	1	Bearing-wheel separa-	do .....	25	1
Revolving .....	do .....	46	1	tors .....			
Shovel .....	do .....	430	1	Endless-carrier .....	do .....	63	1
Side-hill .....	do .....	315	1	Endless-carrier—			
Steam .....	do .....	189	1	Receptacles .....	do .....	95	1
Wheel .....	do .....	1284	1	Plow and screen .....	do .....	164	1
Pluggers .....	Dentistry .....	10	20	Plow-clearers .....	do .....	34	1
Pluggers—				Plow, vibrating screens .....	do .....	114	1
Air .....	do .....	38	20	Screen-cylinders .....	do .....	20	1
Angle attachments .....	do .....	19	20	Sifting-wheels, side-de-	do .....	52	1
Hand-operated .....	do .....	51	20	livery .....			
Power-operated .....	do .....	62	20	Spiral conveyers .....	do .....	23	1
Plug-making .....	Tobacco .....	119	2	Toothed-drum .....	do .....	91	1
Plugs .....	do .....	54	2	Potato-planters .....	Seeders and Planters .....	121	1
Plumb-hobs .....	Measuring-Instruments .....	14	23	Pots and kettles .....	Stoves and Furnaces .....	148	19
Plungers .....	Seeders and Planters .....	87	1	Pots and tools .....	Painting .....	50	31
Pneumatic .....	Ordnance .....	68	22	Pot-sleepers .....	Railways .....	100	4
Pneumatic organ actions .....	Music .....	66	5	Pottery articles .....	Clay and Pottery .....	66	15
Pneumatic propellers .....	Marine Propulsion .....	50	22	Pottery-kilns .....	do .....	37	15
Pneumatic railways .....	Pneumatics .....	28	28	Pottery-machines .....	do .....	176	15
Pneumatic railways—				Poultry-culture .....	Care of Live Stock .....	146	2
Dispatch-carriers .....	do .....	11	28	Powder—			
Dispatch-tubes .....	do .....	124	28	Blasting .....	Explosives .....	114	6
Motor-charging .....	do .....	21	28	Gun .....	do .....	81	6
Pneumatic self-playing	Music .....	75	5	Power-hammers .....	Metal-Forging .....	151	13
instruments .....				Practice violins .....	Music .....	4	5
Pneumatic signals .....	Railways .....	45	4	Precipitating .....	Coating with Metal .....	100	3
Pneumatic signals .....	Signals .....	88	22	Preparing grain—			
Automatic .....	Railways .....	51	4	Processes .....	Mills .....	54	25
Pneumatic switches .....	do .....	16	4	Steaming and dampen-	do .....	66	25
Pocket-book fasteners	Packing and Storing Vessels	44	32	ing .....			
and frames .....				Preparing seed .....	Seeders and Planters .....	9	1
Pocket-book holders .....	do .....	104	32	Preserving .....	Hides, Skins, and Leather .....	28	31
Pocket-books .....	do .....	19	32	Preserving—			
Pocket-lighters .....	Lamps and Gas-Fittings .....	101	30	Cold .....	Preserving .....	42	6
Pockets .....	Apparel .....	81	24	Exclusion of air .....	do .....	246	6
Points .....	Plows .....	151	1	Press-copying .....	Printing .....	14	17
Pokers. Shovels, tongs,	Stoves and Furnaces .....	117	19	Press-copying—			
and .....				Damping .....	Bleaching and Dyeing .....	53	17
Pokes .....	Care of Live Stock .....	146	2	Press-dyeing .....	Woodworking-Machines .....	132	29
Poles and shafts .....	Carriages and Wagons .....	272	10	Presser bars and rolls .....	Sewing-Machines .....	119	24
Poles and shafts—				Presser feet and lifters .....	Glass .....	80	15
Convertible .....	do .....	37	10	Presses .....			
Pole-tips .....	do .....	106	10	Baling—			
Polycycles—				Articles and attach-			
Figure .....	Velocipedes .....	78	7	ments—	Presses .....	127	2
Propulsion—				Bale-band tighten-			
Axle-couplings .....	do .....	16	7	ers .....			
Crank and chain .....	do .....	89	7	Bale-ejectors .....	do .....	13	2
Crank and gear .....	do .....	46	7	Bales and bale-cov-	do .....	59	2
Crank and pitman .....	do .....	16	7	ers .....			
Lever and crank .....	do .....	148	7	Binders .....	do .....	35	2
Lever and ratchet .....	do .....	83	7	Boxes and frames .....	do .....	77	2
Lever, crank, and	do .....	51	7	Brakes .....	do .....	1	2
gear, or chain .....				Condensers .....	do .....	3	2
Lever, ratchet, and	do .....	51	7	Discharge-end con-	do .....	9	2
gear, or chain .....				tracting devices .....			
Miscellaneous .....	do .....	74	7	Division - blocks	do .....	10	2
Rack and pinion .....	do .....	19	7	and block-insert-			
Rowing-machines .....	do .....	14	7	ers .....			
Spring-frame .....	do .....	15	7	Feeders .....	do .....	44	2
Steering devices .....	do .....	33	7	Indicators .....	do .....	4	2
Polygonal forms .....	Wood-Turning .....	53	29	Movable bale-boxes .....	do .....	71	2
Portable .....	Roofing .....	82	29	Plungers .....	do .....	2	2
Portable .....	Steam-Engines .....	130	18	Retainers .....	do .....	5	2
Portable .....	Towers .....	6	4	Belt and roller .....	do .....	53	2
Portable cross-overs .....	Railways .....	13	4	Plunger—			
Portable houses .....	Carpentry .....	81	29	Cam .....	do .....	83	2
Portable nursery-fences .....	Furniture .....	5	8	Crank and pitman .....	do .....	64	2
Portable signals .....	Railways .....	12	4	Lever .....	do .....	93	2
Portable track .....	do .....	36	4	Rack bar and pinion .....	do .....	91	2
Portfolios .....	Packing and Storing Vessels	33	32	Ratchet and grap-	do .....	131	2
Portfolios—				ple bar .....			
Roll .....	do .....	9	32	Rebounding .....	do .....	245	2
Positive-lock .....	Railway-Brakes .....	9	34	Screw .....	do .....	395	2
Postage and revenue	Bookbinding .....	80	5	Thrust-bar .....	do .....	59	2
stamps .....				Toggle-joint .....	do .....	385	2
Post-hole diggers, trans-	Harrows and Diggers .....	53	1	Toggle-joint—			
planters .....				Inverted .....	do .....	95	2
Post-office boxes .....	Stationery .....	82	5	Windlass .....	do .....	196	2
Posts .....	Lamps and Gas-Fittings .....	17	30	Screw .....	do .....	6	2
Posts—				Bundling—			
Bases—				In lengths .....	do .....	81	2
Metal .....	Fences .....	171	1	In lengths—			
Plastic .....	do .....	81	1	Shingles .....	do .....	24	2
Wood .....	do .....	12	1	Wool .....	do .....	43	2
Braces—				Can-filling machines .....	do .....	130	2
Lateral .....	do .....	118	1	Copying—			
Longitudinal .....	do .....	49	1	Fluid-pressure .....	do .....	6	2
Metal .....	do .....	286	1	Hand-impressing .....	do .....	6	2
Plastic .....	do .....	41	1	Hand-impressing—			
Wood .....	do .....	45	1	Book-flexure .....	do .....	14	2
Pot and lid lifters .....	Stoves and Furnaces .....	104	19	Roller mechanism .....	do .....	22	2



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Presses—				Pulleys—			
Expressing—				Lubricating .....	Journal-Boxes, Pulleys, and Shafting.	279	12
Articles and attach- ments—				Split .....	do .....	182	12
Boxes and frames ..	Presses .....	93	2	Pulp engines and bed- plates .....	Paper-Making .....	99	15
Cake-formers .....	do .....	12	2	Pulp washing and strain- ing .....	do .....	133	15
Cake-strippers .....	do .....	2	2	Pumping .....	Steam-Engines .....	328	18
Cake-trimmers .....	do .....	1	2	Pumping—	do .....	103	18
Mats .....	do .....	88	2	Duplex .....	Pumps .....	107	9
Belt .....	do .....	34	2	Pumps, miscellaneous parts .....	Clasps, Buckles, and Buttons	300	11
Belt and plunger .....	do .....	4	2	Punches .....	Metal Punching and Shear- ing .....	60	14
Belt and roller .....	do .....	53	2	Punching .....	do .....	180	14
Disk .....	do .....	6	2	Punching cutters .....	Woodworking-Machines .....	159	29
Plunger—				Punching-machines—			
Cam .....	do .....	24	2	Crank .....	Metal Punching and Shear- ing .....	24	14
Crank and pitman .....	do .....	2	2	Foot-lever .....	do .....	16	14
Lever .....	do .....	80	2	Hammer .....	do .....	20	14
Rack bar and pinion .....	do .....	18	2	Hand-lever .....	do .....	58	14
Ratchet and grap- ple bar .....	do .....	14	2	Rotary .....	do .....	13	14
Screw .....	do .....	8	2	Screw .....	do .....	33	14
Toggle-joint .....	do .....	25	2	Puppet .....	Steam-Engine Valves .....	57	18
Windlass .....	do .....	10	2	Purifiers—			
Roller .....	do .....	177	2	Boxes .....	Gas .....	16	31
Screw .....	do .....	8	2	Compounds .....	do .....	20	31
Without operating mechanism .....	do .....	36	2	Condensers .....	do .....	24	31
Packing—				Miscellaneous .....	do .....	15	31
Cheese .....	do .....	102	2	Processes .....	do .....	15	31
Continuous compres- sion .....	do .....	147	2	Revivifying .....	do .....	9	31
Silos .....	do .....	23	2	Trays .....	do .....	26	31
Single-compression .....	do .....	149	2	Washers and scrubbers .....	do .....	65	31
Pressing .....	Cloth-Finishing .....	80	21	Washers and scrub- bers—			
Pressing .....	Metal-Ornamenting .....	40	14	Float .....	do .....	5	31
Pressure-gages .....	Measuring-Instruments .....	100	23	Reciprocating .....	do .....	4	31
Pressure-gages—				Rotary .....	do .....	30	31
Bourdon .....	do .....	54	23	Purifying coal .....	Fuel .....	10	15
Diaphragm .....	do .....	84	23	Purifying water .....	Chemicals .....	75	6
Piston .....	do .....	31	23	Purses .....	Packing and Storing Vessels	41	32
Pressure mechanism .....	Safts .....	16	20	Push-bar .....	Driers .....	2	28
Primers .....	Projectiles .....	88	22	Putting out and stretch- ing .....	Hides, Skins, and Leather .....	28	31
Printing .....	Telegraphy .....	87	16	Putting out and stretch- ing .....			
Printing and vignetting .....	Photography .....	142	6	Stretching-frames .....	do .....	35	31
Printing appliances .....	Hardware-Making .....	76	13	Puzzles and magic .....	Games and Toys .....	346	7
Printing couple appli- ances .....	Printing .....	23	17	Pyro-magneto-electric devices .....	Electricity. Generation .....	11	26
Anti-offset devices .....	do .....	29	17	Pyrotechnic compounds .....	Explosives .....	14	6
Blankets .....	do .....	22	17	Pyrotechnic signals .....	Signals .....	73	22
Friskets and fingers .....	do .....	15	17	Quadruplex .....	Telegraphy .....	89	16
Grippers .....	do .....	27	17	Quicksilver .....	Metallurgy .....	42	3
Printing—				Quilting .....	Sewing-Machines .....	178	24
Mechanical .....	Photography .....	87	6	Quilting-frames .....	Furniture .....	147	8
Multiple-wheel .....	Telegraphy .....	131	16	Race-courses .....	Coin-Controlled Apparatus .....	12	14
Wheel .....	do .....	257	16	Racks and pinions .....	Machine Elements .....	461	12
Prisms .....	Optics .....	1	30	Racks and rests .....	Kitchen and Table Articles .....	31	8
Processes .....	Artificial Stone, Lime, and Cement .....	24	15	Racks and stands .....	Driers .....	54	28
Processes .....	Brakes and Gins .....	14	21	Radio-phones .....	Telephony .....	8	16
Processes .....	Caoutchouc and Minor Plas- tics .....	119	15	Raffing and booming .....	Boats .....	66	22
Processes .....	Driers .....	20	28	Rag dusters and engines .....	Paper-Making .....	26	15
Processes .....	Jewelry .....	22	5	Rail .....	Railway-Brakes .....	19	34
Processes .....	Mineral Oils .....	9	31	Rail-braces .....	Railways .....	38	4
Processes .....	Painting .....	98	31	Rail-grippers .....	Railway-Brakes .....	19	34
Processes .....	Paper-Making .....	247	15	Rail-joints—			
Processes .....	Photography .....	63	6	Boxes .....	Railways .....	5	4
Processes .....	Printing .....	49	17	Bridge-pieces—			
Processes—				Base .....	do .....	129	4
Chemical .....	Mineral Oils .....	88	31	Tread .....	do .....	157	4
Injecting gases .....	do .....	43	31	Joint-chairs .....	do .....	254	4
Residuum .....	do .....	16	31	Miscellaneous .....	do .....	28	4
Washing and Filtering .....	do .....	21	31	Scarf .....	do .....	82	4
Producers .....	Gas .....	67	31	Splice-bars .....	do .....	175	4
Projectiles .....	Projectiles .....	247	22	Splice-bars—			
Props. Stays and .....	Trees, Plants, and Flowers .....	14	1	Girder .....	do .....	41	4
Protecting shores .....	Hydraulic Engineering .....	25	4	Threadless bolts .....	do .....	94	4
Protractors .....	Drafting .....	72	23	Truss .....	do .....	21	4
Provision safes .....	Furniture .....	42	8	Web-blocks .....	do .....	29	4
Provision safes—				Railroad-rails .....	Metal-Rolling .....	79	13
Knockdown .....	do .....	15	8	Rails .....	Railways .....	163	4
Revolving .....	do .....	21	8	Rails—			
Window .....	do .....	7	8	Compound .....	do .....	160	4
Pruning-implements .....	Cutlery .....	271	13	Rack .....	do .....	21	4
Puddlers' balls .....	Metal-Rolling .....	30	13	Railway .....	Electric Signaling .....	133	16
Puddling-hearth .....	Metallurgy .....	68	3	Railway—			
Puddling-hearths—				Block .....	do .....	129	16
Chills and bottoms .....	do .....	28	3	Block systems .....	do .....	64	16
Doors and bits .....	do .....	31	3	Cab .....	do .....	48	16
Pug-mills .....	Clay and Pottery .....	280	15	Cab—			
Pulleys .....	Journal-Boxes, Pulleys, and Shafting .....	304	12	Sectional-rail .....	do .....	185	16
Pulleys—				Car .....	Telegraphy .....	75	16
Expansible .....	do .....	59	12	Chairs .....	Wagon, Car, and Track Irons	41	13
Grip .....	do .....	20	12				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Railway—				Refrigerators	Refrigeration	1032	28
Gates—	Fences	12	1	Regenerators—			
Gates—				Double-surface	Metallurgy	35	3
Automatic mast	do	52	1	Single-surface	do	75	3
Cattle-guards	do	103	1	Registering ballot-boxes	Measuring-Instruments	46	23
Electric	do	17	1	Registers	do	436	23
Mast	do	54	1	Registers—			
		53	1	Fare	do	243	23
Platform-guards	do	10	1	Game	do	76	23
Pneumatic	do	41	1	Passenger	do	95	23
Rocking	do	52	1	Regular forms—			
Sliding	do	46	1	Lateral-movement	Wood-Turning	78	29
Swinging	do	46	1	Longitudinal-move- ment.	do	57	29
		51	1	Regulators—			
Vertically-moving	do	52	1	Alternating	Electricity. Generation	27	26
Sectional-rail	Electric Signaling	150	16	Alternating—			
Tank-feeders	Pumps	55	9	Compound	do	23	26
Track-instruments	Electric Signaling	74	16	Brush-adjustment	do	134	26
Rain-gages	Measuring-Instruments	2	23	Circuit-interruption	do	20	26
Raising sunken vessels	Ships	109	22	Compound g-m-a- chines.	do	35	26
Rake and harrow irons	Tools and Implements.	62	13	Compound winding	do	64	26
	Making			Counter electromotive force.	do	22	26
Rakers, hand	Harvesters	103	7	Engine control	do	36	26
Rakes	Harrows and Diggers	166	1	Magnetic reluctance	do	19	26
Rakes—				Reducing sparks	do	17	26
Horse	Harvesters		7	Resistance	do	161	26
Rakes and tedders, com- bined.	do	79	7	Sectional winding	do	61	26
Rams	Pumps	52	9	Transmitting mechan- ism.	do	5	26
Ranges	Stoves and Furnaces	262	19	Regulators and spacers	Dentistry	27	20
Razors	Cutlery	92	13	Rein-buttons	Harness	75	11
Reading	Educational Appliances	65	31	Rein-holders	do	300	11
Reamers	Artesian and Oil Wells	117	25	Rein-supports	do	100	11
Reamers and drifts	Metal Boring and Drilling	111	13	Relays and repeaters	Telephony	35	16
Reciprocating	Hydraulic Motors	116	9	Relays and sounders	Telegraphy	241	16
Reciprocating brakes	Brakes and Gins	110	21	Rendering	Oils, Fats, and Glue	125	31
Reciprocating die-car- riers—				Renovating dress	Bleaching and Dyeing	15	6
Electrical	Matrix-Making	37	30	Repairing and capping rails.	Wagon, Car, and Track Irons.	30	13
Mechanical	do	11	30	Repeaters			
Reciprocating propellers	Marine Propulsion	88	22	Resawing	Horology	51	23
Reciprocating tools	Hides, Skins, and Leather	87	31	Rests	Telegraphy	48	16
Recorders	Electric Signaling	37	16	Reinforcing	Wood-Sawing	59	29
Recorders	Measuring-Instruments	104	23	Reinforcing	Metal Turning, Planing, and Milling.	165	13
Recorders—				Reinforcing			
Fare	do	30	23	Reinforcing			
Manual	do	64	23	Reinforcing			
Passenger	do	35	23	Reinforcing			
Pressure	do	44	23	Reinforcing			
Speed	do	49	23	Reinforcing			
Steam-engine indicators	do	55	23	Reinforcing			
Recording attachments	Music	13	5	Reinforcing			
Reducing and separating	Metallurgy	58	3	Reinforcing			
ing—				Reinforcing			
Aluminum	do	39	3	Reinforcing			
Apparatus	do	5	3	Reinforcing			
Copper	do	35	3	Reinforcing			
Desilverizing lead	do	18	3	Reinforcing			
Desulphurizing ores	do	63	3	Reinforcing			
Disintegrating ores	do	27	3	Reinforcing			
Flux	do	32	3	Reinforcing			
Gold and silver	do	84	3	Reinforcing			
Manganese	do	9	3	Reinforcing			
Nickel and cobalt	do	28	3	Reinforcing			
Ore bricks	do	10	3	Reinforcing			
Sodium	do	5	3	Reinforcing			
Reed	Telegraphy	57	16	Reinforcing			
Reed-boards	Music	48	5	Reinforcing			
Reed-organ attachments	do	15	5	Reinforcing			
Reed-organs	do	148	5	Reinforcing			
Reed-organs—				Reinforcing			
Folding	do	9	5	Reinforcing			
With pipes	do	18	5	Reinforcing			
Reeds	do	63	5	Reinforcing			
Reeds and reed-making	Weaving	18	21	Reinforcing			
Reefing and furling sails	Ships	106	22	Reinforcing			
Reels	Cordage	92	21	Reinforcing			
Reels	Harvesters	229	7	Reinforcing			
Reels	Paper-Manufactures	34	17	Reinforcing			
Reels—				Reinforcing			
Skein	Driers	4	28	Reinforcing			
Tray-carrier	do	65	28	Reinforcing			
Winding	do	4	28	Reinforcing			
Reels and spools	Wire-Working	26	14	Reinforcing			
Refining fat oils	Oils, Fats, and Glue	105	31	Reinforcing			
Refining salt	Sugar and Salt	28	6	Reinforcing			
Refining sugar	do	102	6	Reinforcing			
Reflectors—				Reinforcing			
Hooded	Lamps and Gas Fittings	8	30	Reinforcing			
Miscellaneous	do	21	30	Reinforcing			
Side	do	118	30	Reinforcing			
Refracting attachments	do	50	30	Reinforcing			
Refrigerator-buildings	Refrigeration	240	28	Reinforcing			
Refrigerator-cars	do	249	28	Reinforcing			

\*Reissnes.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Roasters—				Rotary—			
Kilns .....	Metallurgy .....	56	3	Oscillating-piston en-	Steam-Engines .....	72	18
Muffles .....	do .....	26	3	gines.	.....do .....	91	18
Revolving—				Reciprocating-piston			
Cylinders .....	do .....	65	3	engines.	Pumps .....	147	9
Retorts .....	do .....	25	3	Single-piston	Steam-Engine Valves .....	231	18
Shaft and shelf .....	do .....	66	3	Valves.	Steam-Engines .....	50	18
Stirrers—				Wabbling-piston en-			
Endless-chain .....	do .....	13	3	gines.	Hides, Skins, and Leather .....	58	31
Reciprocating .....	do .....	8	3	Rotating tools .....	Games and Toys .....	141	7
Rotary .....	do .....	30	3	Roundabouts .....	Woodworking-Machines .....	51	29
Screw .....	do .....	16	3	Routing .....	do .....	65	29
Roasting and smelting	do .....	45	3	Routing-pattern .....	Boots and Shoes .....	265	11
hearth.				Rubber—			
Rock-drills .....	Steam-Engines .....	309	18	Hard .....	Caoutchouc and Minor Plas-	61	15
Rockets .....	Projectiles .....	37	22	Soft .....	do .....	139	15
Rocking frames .....	Hides, Skins, and Leather .....	53	31	Rubber-dam clamps .....	Dentistry .....	45	20
Rod-packing .....	Steam-Engines .....	450	18	Rudders .....	Ships .....	125	22
Rods for wire .....	Metal-Rolling .....	148	13	(See Steering mechan-			
Roller-bearings .....	Railway Rolling-Stock .....	11	34	ism, rudders.)			
(See Trucks, also				Rutlers and gatherers .....	Sewing-Machines .....	287	24
wheels.)				Rulers, desk .....	Stationery .....	125	5
Roller-dies .....	Metal-Drawing .....	9	13	Ruling-machines .....	Printing .....	134	17
Roller-gins .....	Brakes and Gins .....	132	21	Ruling-machines—			
Rollers and harrows .....	Harrows and Diggers .....	109	1	Rotary .....	do .....	13	17
Roller-skates .....	Games and Toys .....	370	7	Runners and notches .....	Umbrellas and Canes .....	169	24
Rollers, land .....	Harrows and Diggers .....	47	1	Running-gear .....	Carriages and Wagons .....	478	10
Roller-tools .....	Sheet-Metal Ware, Making .....	75	14	Running-stitch .....	Sewing-Machines .....	19	24
Roll-holders .....	Photography .....	61	6	Sabots and wads .....	Projectiles .....	68	22
Rolling .....	Metal-Ornamenting .....	47	14	Saddle-bags .....	Baggage .....	25	32
Rolling—				Saddles .....	Velocipedes .....	235	7
Cross .....	Metal-Tube Manufacture .....	9	13	Sad-iron holders .....	Laundry .....	75	27
Hoppers .....	Seeders and Planters .....	195	1	Sad-irons .....	do .....	390	27
Longitudinal .....	Metal-Tube Manufacture .....	55	13	Safe-boltwork .....	Safes .....	64	20
Miscellaneous .....	Metal-Rolling .....	140	13	Safe-boltwork—	do .....	30	20
Pins .....	Bread, Cracker, and Lozenge	32	15	Automatic .....	do .....	32	20
	Making .....			Safe-filling .....	do .....	32	20
Spiral .....	Metal-Tube Manufacture .....	41	13	Safety .....	Steam-Engine Valves .....	373	18
Rolling and embossing .....	Hides, Skins, and Leather .....	54	31	Safety attachments .....	Clasps, Buckles, and Buttons .....	150	11
Rolls .....	Driers .....	7	28	Safety-deposit .....	Safes .....	4	20
Rolls or webs—				Safety-deposit boxes .....	do .....	7	20
Continuous-motion,	Painting .....	14	31	Safety devices .....	Steam-Boilers .....	52	18
band.	.....do .....	5	31	Safety-harness .....	Accouterments .....	7	32
Interrupted-motion,				Safety lamps and lanterns .....	Lamps and Gas-Fittings .....	27	30
band.				Safety-tube and central-			
Roofings and coverings,	Composite Roofings and Cov-	274	15	draft—			
composition.	erings .....			Draw-bar .....	do .....	95	30
Roofs .....	Roofing .....	51	29	Miscellaneous .....	do .....	51	30
Roofs—				No-raiser .....	do .....	223	30
Fireproof .....	Fireproof Buildings .....	22	4	Rack-bar .....	do .....	61	20
Root-guards .....	Trees, Plants, and Flowers .....	3	1	Screw-rod .....	do .....	27	30
Rope machines. Cord	Cordage .....	242	21	Swiss screw .....	do .....	53	30
and .....				Safety-valves .....	Water-Distribution .....	41	9
Rossing bark .....	Woodworking-Machines .....	30	29	Safety-wheels .....	Horology .....	62	23
Rotary .....	Hydraulic Motors .....	431	9	Sails and rigging .....	Ships .....	90	22
Rotary .....	Steam-Boilers .....	17	18	Salines .....	Chemicals .....	185	6
Rotary—				Saliva-ejectors .....	Dentistry .....	11	20
Alternating-piston en-	Steam-Engines .....	18	18	Salt-making .....	Sugar and Salt .....	89	6
gines.				Sampling-tubes .....	Water-Distribution .....	22	9
Brakes—				Sand .....	Pumps .....	39	9
Breakers and crushers .....	Brakes and Gins .....	46	21	Sand-bands .....	Carriages and Wagons .....	120	10
Rotary brakes .....	do .....	135	21	Sand-blowers .....	Pneumatics .....	8	28
Scutchers .....	do .....	23	21	Sanding devices .....	Railway Rolling-Stock .....	5	34
Concentric-piston en-	Steam-Engines .....	712	18	Sanding devices—			
gines.				Chain-feed .....	do .....	5	34
Cylinders .....	Hides, Skins, and Leather .....	63	31	Oscillatory feed .....	do .....	28	34
Die-carriers .....	Matrix-Making .....	42	30	Reciprocatory feed—			
Disk .....	Driers .....	2	28	Horizontal .....	do .....	15	34
Double-piston .....	Pumps .....	263	9	Vertical .....	do .....	11	34
Eccentric-piston en-	Steam-Engines .....	160	18	Rotary feed .....	do .....	12	34
gines.				Sap-buckets .....	Trees, Plants, and Flowers .....	35	1
Engines .....	Hydraulic Motors .....	93	9	Sap-spouts .....	do .....	52	1
Feathering .....	Steam-Engines .....	152	18	Sarcophagi .....	Clay and Pottery .....	26	15
Impact-engines .....	Linotyping .....	5	30	Sash-balances—			
Machines .....	Printing .....	26	17	Drum and cord .....	Builders' Hardware .....	69	20
Machines—				Friction .....	do .....	13	20
Associators .....	do .....	31	17	Friction-roller .....	do .....	7	20
Associators—				Gear and rack .....	do .....	56	20
Stop-sheet .....	do .....	9	17	Spring .....	do .....	11	20
Associators and fold-	do .....	54	17	Weight .....	do .....	102	20
ers.				Sash-cord fasteners .....	do .....	88	20
Machines and associ-	do .....	13	17	Sash-cord fasteners—			
ators.				Weight .....	do .....	19	20
Machines and deliv-	do .....	20	17	Sash-cord guides .....	do .....	115	20
eries.				Sashes and blinds—			
Machines and folders .....	do .....	12	17	Making .....	Woodworking-Machines .....	5	29
Machines, associa-	do .....	27	17	Tenoning .....	do .....	26	29
tors, and folders.				Sash-fasteners .....	Builders' Hardware .....	333	20
Non-perfecting .....	do .....	49	17	Sash-fasteners—			
Reversing and per-	do .....	30	17	Gear and rack .....	do .....	90	20
fecting.				Lifts .....	do .....	139	20
Rotary conical print-	do .....	7	17	Mid-rail .....	do .....	81	20
ing coupler.							
Molds .....	Metal-Founding .....	27	3				

\*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sash-fasteners—				Scuppers and hawse-holes	Ships	25	22
Right-angle	Builders' Hardware	43	20	Scythes	Tools and Implements.	21	13
Rod-clamps	do	59	20		Making		
Sliding bolts	do	298	20	Scythes and cradles	Harvesters	167	7
Sash-holders	do	210	20	Seal-bolts	Locks and Latches	36	20
Sash-holders—				Sealing-tools	Printing	44	17
Clamps	do	16	20	(See Hand-stamps, seal-			
Combined fasteners	do	128	20	ing-tools.)			
Foot	do	86	20	Seals	Locks and Latches	135	20
Roller-bearing	do	110	20	Seals—			
Strips	do	27	20	Automatic catch	do	35	20
Wedges	do	63	20	Box and bag	do	6	20
Sash-weights	do	32	20	Box-strap	do	11	20
Sausage-machines	Butchering	99	25	Seaming sheets	Sheet-Metal Ware, Making	94	14
Sawbucks	Wood-Sawing	39	29	Seamless	Metal-Tube Manufacture	8	13
Saw clamps and jointers	Tools and Implements.	192	13	Seat-locks	Carriages and Wagons	127	10
	Making			Seats	do	144	10
Saw-gios	Brakes and Gias.	248	21	Seats	Harvesters	47	7
Saw-guards	Wood-Sawing	50	29	Seats—			
Saw-guides	do	135	29	Car	Chairs	264	8
Saw-handles	Woodworking-Tools	198	29	Circus	do	7	8
Saw-banging	Wood-Sawing	128	29	Reversible	do	11	8
Sawing	Metal Puncturing and Shear-	67	14	Shifting	Carriages and Wagons	298	10
	ing			Spring	do	166	10
Sawing-machines, recip-	Wood-Sawing	60	29	Spring	Chairs	78	8
rocating saw				Sectional	Steam-Boilers	522	18
Sawing stone	Stone-Working	223	25	Sectional—			
Sawmill appliances	Wood-Sawing	76	29	Headers	do	254	18
Sawmill-carriages—				Sectional and folding	Boats	78	22
Feed	do	168	29	Sectional conductors—			
Offsetting	do	40	29	Connected	Electricity. Electric Rail-	28	26
Sawmill-dogs	do	161	29		ways.		
Sawmill set-works	do	363	29	Magnetic closers	do	76	26
Saws	Tools and Implements.	86	13	Mechanical closers	do	77	26
	Making			Traveling closers	do	12	26
Saws	Wood-Sawing	271	29	Seeders	Vegetable Cutters and Crusb-	90	25
Saw-setting	Tools and Implements.	376	13		ers.		
	Making			Seed, preparing for plant-	Seeders and Planters	9	1
Saws, gumming	do	125	13	ing.			
Saw-sharpening—				Seed-testers	Trees, Plants, and Flowers.	3	1
Reciprocating tool	do	255	13	Selectors, interlocking	Railways	23	4
Rotating tool	do	184	13	Self-binders			
Saw-swinging	do	185	13	Clips and prepared	Harvesters	27	7
Saw-table gages	Wood-Sawing	101	29	bands			
Saw-teeth	do	232	29	Cord-knotters	do	456	7
Scabbard-bangers	Accoutrements	15	32	General structure	do	484	7
Scabbards	do	13	32	Gleaners and binders	do	33	7
Scaffold binders	Carpentry	32	29	Tension and take-up de-	do	51	7
Scaffolds	do	187	29	vices.			
Scaffolds—				Twisters and tuckers	do	96	7
Bracket	do	61	29	Wire-twisters	do	192	7
Trestle	do	74	29	Self-playing attachments,	Music	44	5
Scaling and singeing	Butchering	21	25	keyboard.			
Scales—				Self-playing instruments	do	175	5
Beams	Measuring-Instruments	90	23	Self-playing instru-			
Cart	do	51	23	ments—			
Hydrostatic	do	31	23	Cylinder	do	84	5
Paes	do	15	23	Electropneumatic	do	7	5
Pendulum	do	112	23	Note-sheets	do	17	5
Platform	do	229	23	Pneumatic	do	75	5
Price	do	76	23	Spurs and picks	do	22	5
Sack	do	97	23	Self-rakers—			
Spring	do	160	23	Endless carriers	Harvesters	160	7
Scarificators and lancets	Surgery	47	6	Gaveling-tongs	do	32	7
Scarf's companions	Stationery	42	5	Platform-movement	do	114	7
School desks and seats	Chairs	397	8	Reciprocating—			
Scissors and shears	Cutlery	259	13	Horizontal curvili-	do	180	7
Scoops	Kitchen and Table Articles	57	8	ear.			
Scows	Ships	86	22	Horizontal rectilinear	do	92	7
Screens	Carding	12	21	Rotary—			
Screens	Furniture	14	8	Horizontal axis	do	80	7
Screens—				Vertical axis—			
Folding	do	25	8	No-switch	do	151	7
Screens and riddles	Thrashing	79	25	Switch	do	141	7
Screw-blank feeders	Metal Bolts, Nuts, Rivets,	39	13	Traveling—			
	and Screws.			Horizontal irregular	do	63	7
Screw-cutting machines	do	380	13	path.			
Screw-drivers	Woodworking-Tools	80	29	Vertical irregular	do	16	7
Screw-drivers—				path.			
Attachments	do	46	29	Seaphores	Signals	59	22
Ratchet	do	44	29	Separating rope	Cordage	2	21
Screw-feed	Seeders and Planters	39	1	Separators	Steam-Boilers	118	18
Screw-propellers—				Separators, boxes, bill-	Stationery	53	5
Fitting and driving	Marine Propulsion	199	22	files.			
Form and construction	do	269	22	Serving apparatus	Paper-Manufactures	51	17
Steering	do	42	22	Serving apparatus—			
Screws	Metal Bolts, Nuts, Rivets,	147	13	Printing attachment	do	44	17
	and Screws.			Roll-holders	do	37	17
	do			Roll-holders—			
Screw-swaging machines	do	101	13	Cutting attachment	do	201	17
Screw-tapping machines	do	77	13	Feeding attachment	do	27	17
Screw-thread bending	Sheet-Metal Ware, Making	57	14	Settees	Chairs	34	8
Screw-threading ma-	Metal Bolts, Nuts, Rivets,	55	13	Setters and threaders	Sewing-Machines	69	24
chines.	and Screws.			Setting and distributing	Printing	235	17
Scribers	Drafting	13	23	Setting gems	Jewelry	100	5
Scrubbing-machines	Brushing and Scrubbing	39	27	Sewage and night-soil...	Fertilizers	87	6
Scrubbing-pails	do	7	27	Sewing	Apparel	35	24
Sculpture	Fine Arts	9	5				

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sewing hats	Sewing-Machines	46	24	Shoes—			
Sewing looped fabrics	do	49	24	Removable-calk	Farriery	200	14
Sewing-needles. Making	Needles and Pins	16	13	Soft-tread	do	92	14
Sewing on buttons	Sewing-Machines	79	24	Swamp	do	18	14
Sewing rugs	do	6	24	Shooting devices	Coin-Controlled Apparatus	3	14
Sewing shoes	do	245	24	Short-thread	Sewing-Machines	31	24
Sextants	Optics	19	30	Short-turning gear	Carriages and Wagons	142	10
Shackles	Locks and Latches	61	20	Shoulder-braces	Crutch and Corsets	45	24
Shade and curtain bangera	Curtains, Shades, and Screens	78	8	Shovels	Harrow and Diggers	229	1
Shade-brackets	do	73	8	Shovels, tongs, and pokers	Stoves and Furnaces	117	19
Shade-fastenings	do	37	8	Show-cases	Store-Furniture	47	8
Shade-guides	do	48	8	Show-cases—			
Shade-hangers, verti-	do	168	8	Lid-lifters	do	15	8
cally-adjustable.				Shutter-holders	Builders' Hardware	88	20
Shade-raisers	do	113	8	Shutter-fasteners	do	37	20
Shade-rollers	do	48	8	Shutter-fasteners—			
Shade-rollers—				Bars or bolts	do	22	20
Dropping	do	35	8	Catches—			
Friction-brakes	do	101	8	Double	do	82	20
Ratchet and pawl	do	102	8	Gravity	do	8	20
Spring	do	251	8	Rod	do	30	20
Shade-sticks	do	24	8	Single	do	31	20
Shade-supports—				Sliding	do	10	20
Double-clamp	Lamps and Gas-Fittings	22	30	Wall	do	23	20
Drop	do	8	30	Combined sash	do	48	20
Miscellaneous	do	28	30	Fire	do	26	20
Spider	do	63	30	Hooks	do	35	20
Umbrella	do	12	30	Operators	do	14	20
Shaft and cylinder	Driers	4	28	Shutters	Carpentry	158	29
Shaft and shaft	do	37	28	Shutters	Iron Structures	72	4
Shaft-casings	Journal-Boxes, Pulleys, and	10	12	Shutters—	Photography	4	6
	Shafting.			Curtain	do	5	6
Shaft-couplings	do	268	12	Diaphragm	do	9	6
Shaft-hangers	do	162	12	Fireproof	Fireproof Buildings	54	4
Shafting	do	7	12	Pivoted	Photography	119	6
Shafting—				Sliding	Carpentry	69	29
Flexible	do	40	12	Sliding	Photography	26	6
Shafts—				Swinging	Carpentry	33	29
Inclined	Driers	9	28	Shutter-workers	Builders' Hardware	15	20
Vertical	do	142	28	Shutter-workers—			
Zigzag	do	6	28	Combined slat	do	27	20
Shafts and pulleys	Metal-Forging	25	13	Cord or chain	do	16	20
Shaking	Driers	20	28	Lever	do	33	20
Shanks and machines	Boots and Shoes	100	11	Rotary shaft	do	146	20
Shaping	Shaping Fluid Metal	11	3	Sliding shaft	do	55	20
Shaping—				Sliding shutter	do	9	20
By dies—				Shuttle-boxes	Weaving	173	21
Bars and plates	do	14	3	Shuttle-checks	do	42	21
Covering wire	do	67	3	Shuttle-guards	do	29	21
Tube	do	41	3	Shuttle-machines	Sewing-Machines	704	24
Tube—				Shuttle-motions—			
Compound	do	17	3	Fly	Weaving	166	21
Curved	do	25	3	Pneumatic	do	4	21
By rolls	do	32	3	Positive	do	71	21
Shaping and slotting	Metal Turning, Planing, and	91	13	Shuttles—			
	Milling.			Cop-cell and cover	do	20	21
Sharpeners, pencil	Stationery	294	5	Float-detecting	do	20	21
Shaving-cups	Toilet	21	24	Guides and tensions	do	95	21
Shaving, fixed knife	Woodworking-Machines	34	29	Shuttles	do	206	21
Shawl-straps	Baggage	71	32	Shuttles and bobbins	Sewing-Machines	149	24
Sheep-protectors	Care of Live Stock	3	2	Shuttle-threaders	Weaving	9	21
Shearing	Cloth-Finishing	63	21	Side	Nut and Bolt Locks	305	14
Shears—				Side—			
Lever and sliding	Metal Punching and Shear-	182	14	Key and ratchet	do	167	14
	ing.			Sidings and partitions—			
Rotary	do	103	14	Concrete	Fireproof Buildings	23	4
Shedding	Weaving	310	21	Tile	do	15	4
Sheet and hoop iron man-	Metal-Rolling	112	13	Sights	Firearms	168	22
ufacture.				Sights	Ordnance	27	22
Sheet-stencil making	Printing	36	17	Signal-lights	Lamps and Gas-Fittings	26	30
Shelf and tray	Driers	214	28	Signals	Railways	91	4
Shell-fuses	Projectiles	123	22	Signals—			
Shells	do	182	22	Automatic	do	45	4
Shelving	Store-Furniture	42	8	Automatic—			
Shields	Ordnance	20	22	Agitated	do	47	4
Shifting-rails	Carriages and Wagons	117	10	Alarm	do	77	4
Shingle	Wood-Sawing	129	29	Block	do	48	4
Shingle—				Crossing	do	59	4
Horizontal-saw	do	114	29	Setting apparatus	do	10	4
Shingling-brackets	Carpentry	104	29	Stops	do	6	4
Ship	Pumps	26	9	Tappets	do	8	4
Ship-building	Ships	238	22	Trips	do	27	4
Ships' logs	Measuring-Instruments	66	23	Bar	do	33	4
Shirts	Apparel	420	24	Danger	do	19	4
Shoal-alarms	Signals	9	22	Detonating	do	95	4
Shock-compressors	Harvesters	41	7	Light	do	6	4
Shoe-blackening stands	Brushing and Scrubbing	48	27	Pneumatic	do	45	4
Shoe-brushes	do	115	27	Pneumatic	Signals	88	22
Shoe-fastenings	Boots and Shoes	700	21	Pneumatic—			
Shoeing-stands	Farriery	18	14	Automatic			
Shoe-nail clinchers	do	38	14	Agitated	Railways	51	4
Shoe nails and tacks	Nails and Spikes	114	13	Alarm	do	12	4
Shoes	Farriery	116	14	Block	Signals	73	22
Shoes—				Crossing	Railways	89	4
Composite	do	84	14	Setting apparatus	do	13	4
Nailless	do	133	14	Stops	Advertising	25	32
Ox	do	16	14	Tappets	do	50	32

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Signs .....	Advertising .....	40	32	Sliding gates —	Fences .....	52	1
Signs—				Suspended .....	do .....	56	1
Automatic-figure .....	do .....	20	32	Vibrating tracks .....	Fire Escapes and Ladders ..	8	4
Belt .....	do .....	50	32	Sliding-poles .....	Driers .....	18	28
Endless-belt .....	do .....	55	32	Sliding rack .....	Woodworking-Machines ..	132	29
Endless-belt—				Slivering .....	Masonry .....	11	4
Motors—				Smoke and air flues .....	Steam-Boiler Furnaces .....	189	18
Clock .....	do .....	20	32	Smoke and gas returning ..	Steam-Boilers .....	50	18
Vehicle .....	do .....	18	32	Smoke and gases. Intro-			
Guide-post .....	do .....	25	32	ducing .....	Tobacco .....	17	2
Hanging .....	do .....	20	32	Smoking-tobacco .....	do .....	39	2
Illuminated .....	do .....	40	32	Smoking-tubes .....	Clasps, Buckles, and Buttons	600	11
Illuminated—				Soap-hooks .....	Stoves and Furnaces .....	93	19
Lantern .....	do .....	36	32	Snow and ice melters .....	Tobacco .....	2	2
Perforated .....	do .....	32	32	Snuff-manufacture .....	Oils, Fats, and Glue .....	35	31
Interchangeable-letter .....	do .....	50	32	Soap articles .....	Games and Toys .....	17	7
Interchangeable-slide .....	do .....	22	32	Soap-bubble pipes .....	Oils, Fats, and Glue .....	40	31
Mechanically-rotated .....	do .....	53	32	Soap-cutting .....	do .....	11	31
Multiple-plate .....	do .....	37	32	Soap-frames .....	Furniture .....	57	8
Raised letters .....	do .....	18	32	Soap-holders .....	Oils, Fats, and Glue .....	125	31
Rotatable .....	do .....	47	32	Soap-manufacture .....	do .....	50	31
Single-plate .....	do .....	16	32	Soap-presses .....	Electric Lighting .....	267	16
Street-lamp .....	do .....	27	32	Sockets and keys .....	Chemicals .....	189	6
Vibrating .....	do .....	21	32	Soda and potash .....	Flows .....	45	1
Silk .....	Silk .....	14	21	Sod-cutters .....	Chairs .....	55	8
Singeing .....	Cloth-Finishing .....	8	21	Sofas .....	Caoutchouc and Minor Plas-	139	15
Single-acting compound .....	Steam-Engines .....	103	18	Soft rubber .....	Driers .....	6	28
Single-chuck lathes .....	Wood-Turning .....	87	29		Sheet-Metal Ware. Making	67	14
Single-cylinder .....	Steam-Engines .....	170	18				
Single rail .....	Railway Rolling-Stock ..	5	34	Solar .....			
Single rail—				Soldering—			
Side guides .....	do .....	6	34	Clamps .....	Clamps—		
Side guides—				Expanding-mandrel .....	do .....	42	14
Locomotives .....	do .....	22	34	Trough .....	do .....	30	14
Single top and bottom rail ..	do .....	7	34	Fluxes .....	do .....	7	14
Sinks and traps .....	Baths and Closets .....	565	9	Irons .....	do .....	70	14
Siphons .....	Water-Distribution .....	97	9	Irons—			
Sizing .....	Cloth-Finishing .....	8	21	Heaters .....	do .....	73	14
Sizing. Waterproofing	Paper-Making .....	279	15	Heaters—			
and .....				Electric .....	do .....	26	14
Skaters' appliances .....	Games and Toys .....	27	7	Machines .....	do .....	153	14
Skates .....	do .....	438	7	Machines—			
Skate-wheels .....	do .....	36	7	Dip .....	do .....	74	14
Skeleton .....	Towers .....	99	4	Dip—			
Skids .....	Hoisting .....	83	12	Endless-chain carrier ..	do .....	44	14
Skioning .....	Butchering .....	13	25	rrier .....	do .....	7	14
Skipping-ropes .....	Games and Toys .....	15	7	Reciprocating carrier ..	do .....	27	14
Skirt-elevators .....	Apparel .....	49	24	rrier .....			
Skirt-machines .....	Crinoline and Corsets ..	20	24	Rotary-table carrier ..	do .....	29	14
Skirts .....	Apparel .....	43	24	rrier .....	do .....	70	14
Skylights .....	Carpentry .....	157	29	Endless-chain carrier ..	do .....	46	14
Slack-adjusters .....	Railway-Brakes .....	33	34	Rotary-table carrier ..	do .....	33	14
Slack-adjusters—				Soldering .....	do .....	200	11
Ratchet-bar .....	do .....	26	34	Solders .....	Boots and Shoes .....	360	11
Ratchet-driven screw .....	do .....	12	34	Sole and heel plates .....	do .....		
Slag .....	Metallurgy .....	22	3	Sole and heel trimming			
Slag—				machines .....	do .....	450	11
Disintegrating .....	do .....	30	3	Sole-machines .....	Railway-Brakes .....	12	34
Heaters .....	do .....	19	3	Solenoid .....			
Separators, centrifugal .....	do .....	19	3	(See Electric, solenoid-			
Slate and blackboard rub-	Stationery .....	124	5	operated.)	Boots and Shoes .....	340	11
bers .....				Soles .....	Music .....	14	5
Slate and shingle .....	Roofing .....	76	29	Sole attachments .....	Metallurgy .....	75	3
Slate-mufflers .....	Educational Appliances ..	69	31	Solution and precipita-			
Slates .....	do .....	157	31	tion .....			
Slaughtering, elevating,	Butchering .....	77	25	Solution and precipita-			
and suspending .....				tion—			
Sled-propellers .....	Carriages and Wagons .....	164	10	Apparatus .....	do .....	15	3
Sleds .....	do .....	516	10	Chlorination .....	do .....	70	3
Sleds—				Cyanides .....	do .....	19	3
Brakes .....	do .....	152	10	Ferric salts .....	do .....	12	3
Hand .....	do .....	85	10	Parting bullion .....	do .....	12	3
Shifting-thills .....	do .....	52	10	Sostenuto-pianos .....	Music .....	27	5
Wheel-runners .....	do .....	142	10	Sound-deadening devices	Railway Rolling-Stock .....	6	34
Sledways .....	Railways .....	16	4	Sounding-boards, piano ..	Music .....	67	5
Sleeping-cars .....	Railway Rolling-Stock ..	271	34	Sounding toys .....	Games and Toys .....	138	7
(See Cars, sleeping.)				Sounding wheeled toys ..	do .....	45	7
Sleigh-bells .....	Signals .....	69	22	Spacing-instruments .....	Measuring-Instruments ..	13	23
Slicers .....				Spark-arresters .....	Steam-Boiler Furnaces .....	552	18
Beveling .....	Woodworking-Machines ..	253	29	Spark-catchers .....	Lamps and Gas-Fittings ..	18	30
Reciprocating .....	do .....	251	29	Spark-conductors .....	Steam-Boiler Furnaces .....	178	18
Rotary and oscillating .....	do .....	214	29	Speaking-tubes .....	Signals .....	86	22
Slide .....	Steam-Engine Valves .....	129	18	Special lamps .....	Lamps and Gas-Fittings ..	91	30
Sliding and swinging?	Fences .....	43	1	Special machines .....	Sewing-Machines .....	176	24
gates .....				Special machines .....	Weaving .....	4	21
Sliding and swinging				Special work .....	Woodworking-Machines ..	173	29
gates—				Specific-gravity apparat-	Measuring-Instruments ..	14	23
Hinged rollers .....	do .....	125	1	ts .....			
Suspending frames .....	do .....	127	1	Spectacle-cases .....	Optics .....	34	30
Sliding-door fasteners .....	Locks and Latches .....	128	20	Spectacles .....	do .....	171	30
Sliding-door openers .....	Fences .....	15	1	Speculums .....	Surgery .....	66	6
Sliding gates .....	do .....	74	1	Speed-governors .....	Steam-Engines .....	139	18
Sliding gates—				Speed-governors—			
Lever-openers .....	do .....	103	1	Centrifugal .....	do .....	422	18
				Marine .....	do .....	41	18
Pulley or rack openers .....	do .....	74	1	Pressure .....	do .....	126	18
				Spelter .....	Metallurgy .....	6	3

\*Reissue.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Spelter—				Stairs	Carpentry	71	39
Processes	Metallurgy	31	3	Stakes	Railway Rolling-Stock	13	34
Retorts	do	20	3	(See Cars, freight.)			
Stacks	do	10	3	Stakes and targets	Optics	26	30
Sphygmoscopes	Measuring-Instruments	7	23	Stalk-choppers	Harrows and Diggers	14	1
Spikes, Making	Nails and Spikes	142	13	Stalk-choppers—			
Spindle-driving devices	Spinning	76	21	Draw-cut	do	34	1
Spindles and appurte- nances.	do	145	21	Reciprocating	do	30	1
Spindles and bearings—				Revolviag—			
Bolsters	do	77	21	Horizontal	do	151	1
Combined bearings	do	253	21	Vertical	do	16	1
Sleeve-whirls and stand- ards.	do	38	21	Vine-cutters	do	13	1
Spindles and bearings	do	81	21	Stalk-cutters	Harvesters	115	7
Steps	do	59	21	(See Corn-harvesters.)			
Spinners' and weavers' ap- pliances.	Hardware-Making	70	13	Stalk-pullers—			
Spiauling	Sheet-Metal Ware, Making	59	14	Hand	Harrows and Diggers	58	1
Spinning-tops	Games and Toys	101	7	Wheel	do	28	1
Spiral	Driers	8	28	Stamping	Hardware-Making	60	13
Spiral tool-drivers	Woodworking-Tools	39	29	Stamping	Sheet-Metal Ware, Making	49	14
Spiral weld	Metal-Tube Manufacture	20	13	Stamps—			
Spirometers	Measuring-Instruments	3	23	Hand	Printing	50	17
Spittoons	Furniture	118	8	Postage and revenue	Bookbinding	80	5
Spittoons—				Stanchions	Care of Live Stock	98	2
Covered	do	46	8	Standards	Carriages and Wagons	112	10
Flushing	do	12	8	Standards	Plows	46	1
Splices and joints	Carpentry	54	29	Staples	Chains, Staples, and Horse- shoes.	18	13
Splitting	Leather-Working Machin- ery.	110	11	Staples—			
Splitting and bundling	Woodworking-Machines	74	29	Making	do	60	13
Spokes	Railway Rolling-Stock	—	34	Starch	Sugar and Salt	149	6
(See Wheels.)				Starching-machines	Laundry	53	27
Spoke-shaves	Woodworking-Tools	48	29	Starters	Railway Rolling-Stock	274	34
Spoke-shaves—				Starters and brakes	do	281	34
Adjustable-bit	do	36	29	Stays	Crinoline and Corsets	283	24
Spoke-sockets	Carriages and Wagons	125	10	Stays and props	Trees, Plants, and Flowers	14	1
Sponge-cups	Stationery	110	5	Steading and feeding—			
Sponging	Cloth-Finishing	53	21	Calf-feeders	Care of Live Stock	11	2
Spools	Cordage	26	21	Combined troughs and racks.	do	117	2
Spoons, manufacture of	Hardware-Making	77	13	Feed racks	do	42	2
Spring-gear	Carriages and Wagons	215	10	Feed-troughs	do	250	2
Spring-gears—				Nose-bags	do	106	2
Axle-cross	do	123	10	Releasing devices	do	75	2
Lever	do	104	10	Stall-floors	do	48	2
Longitudinal	do	530	10	Stalls, sheds, and pens	do	86	2
Side-bar cross	do	354	10	Steam-actuated	Steam-Engine Valves	403	18
Springs	Beds	117	8	Steam and bleach chests	Bleaching and Dyeing	48	6
Springs	Carriages and Wagons	90	10	Steam and vacuum pumps	Steam and Vacuum Pumps	227	18
Springs	Hardware-Making	136	13	Steamboat-chimneys	Ships	13	22
Springs	Railway Rolling-Stock	80	34	Steam-boiler and flue scrapers.	Ships	222	25
Springs—				Steam-boiler cleaners	Steam-Boilers	247	18
Bolster	Carriages and Wagons	135	10	Steam-hammers	Steam-Engines	146	18
Braces and equalizers	do	122	10	Steaming-tables	Stoves and Furnaces	22	19
Coil	Railway Rolling-Stock	39	34	Steam-joint packing	Steam-Engines	54	18
Coil and rubber	do	38	34	Steam-mufflers	do	92	18
Coil, cap and bed plates	do	102	34	Steam-organs	Music	4	5
Conical volute	do	29	34	Steam-plows	Plows	189	1
Elliptic	Carriages and Wagons	172	10	Steam-radiator attach- ments.	Stoves and Furnaces	120	19
Elliptic	Railway Rolling-Stock	21	31	Steam-radiators	do	433	19
Cap and bed plates	do	20	34	Steam-sanding	Steam-Engines	50	18
Multiple-disk	do	29	34	Steam steering	do	87	18
Pneumatic	do	35	34	Steam-traps	do	248	18
Platform	Carriages and Wagons	138	10	Steelyards	Measuring-Instruments	21	23
Rubber	Railway Rolling-Stock	10	34	Steering and propulsion	Electricity, Motive-Power	26	26
Rubber—				Steering-heads and han- dle bars.	Velocipedes	164	7
Cap and bed plates	do	30	34	Steering mechanism	Ships	238	22
Shackles	Carriages and Wagons	64	10	Steering mechanism—			
Torsion	do	161	10	Hydraulic	do	24	22
Zigzag	Railway Rolling-Stock	13	34	Pneumatic	do	2	22
Spurs and picks for self- playing instruments.	Music	22	5	Rudders	do	125	22
Spurs and stirrups	Harness	200	11	Wheels in channels	do	8	22
Squares	Measuring-Instruments	125	23	Steering-propellers, (ex- cept screw.)	Marine Propulsion	18	22
Squares—				Stem-winders	Horology	273	23
Center	do	21	23	Stenciling-machines	Printing	61	17
Folding	do	47	23	Stencil-making pens	do	37	17
Stackers	Hoisting	162	12	Stencil-plates	do	67	17
Stalls	Railway-Brakes	8	34	Step-ladders	Fire Escapes and Ladders	385	4
Stalls—				Step-ladders—			
Friction-clutch handles	do	6	34	Store-service	do	26	4
Geared	do	13	34	Steps	Carriages and Wagons	86	10
Locking-ratchets	do	41	34	Steps	Railway Rolling-Stock	11	34
Ratchet-handles	do	26	34	(See Cars.)			
Ratchet-handles—				Steps and foot-rests	Velocipedes	15	7
Pivoted	do	10	34	Stereoscopes	Optics	116	30
Screw	do	14	34	Stereotyping	Printing	36	17
Winding attachments	do	7	34	Stereotyping—			
Stair-covers	Carpentry	26	29	Casting-boxes	do	57	17
Stair-curves	Drafting	17	23	Matrices and materials	do	11	17
Stair-rolls and secmers	Builders Hardware	84	20	Sterilizers, liquid	Stoves and Furnaces	15	19
Stair-rods and secmers—				Stenographic	Type-Writing Machines	15	30
Buttons	do	8	20	Stills	Mineral Oils	28	31
Fasteners	do	13	20	Stills—			
Rods	do	14	20	Bottoms	do	17	31



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Still—				Stoves—			
Condensers .....	Mineral Oils .....	58	31	Cooking—			
Feeders .....	do .....	7	31	39 <sup>o</sup> Steam .....	Stoves and Furnaces .....	27	19
Films .....	do .....	17	31	Gas .....	do .....	587	19
Furnaces and fines .....	do .....	32	31	Heating .....	do .....	397	19
Heads .....	do .....	13	31	Heating—			
Jackets .....	do .....	22	31	Central air-tube .....	do .....	23	19
Rotary .....	do .....	7	31	Horizontal body .....	do .....	41	19
Series .....	do .....	25	31	Hot-air .....	do .....	270	19
Stirrers and scrapers .....	do .....	17	31	Open-front .....	do .....	68	19
Supplementary heating .....	do .....	11	31	Panel .....	do .....	15	19
Tubular .....	do .....	14	31	Parlor .....	do .....	27	19
Utilizing gases and residue .....	do .....	1	31	Lamp .....	do .....	622	19
Vacuum .....	do .....	13	31	Magazine .....	do .....	438	19
Vapor-outlets .....	do .....	9	31	Magazine—			
Stilts .....	Games and Toys .....	38	7	Fireplace .....	do .....	74	19
Stippling .....	Metal-Ornamenting .....	11	14	Vapor .....	do .....	561	19
Stirrers .....	Driers .....	18	28	Stove-shelves .....	do .....	155	19
Stock-cars .....	Care of Live Stock .....	447	2	Straight—			
Stock-grinders .....	Paper-Making .....	95	15	Cams and stops .....	Knitting and Netting .....	16	21
Stockings .....	Apparel .....	43	24	Fashioning-machines .....	do .....	73	21
Stocks .....	Firearms .....	100	22	Looper pin and hook machines .....	do .....	17	21
Stock-sorters .....	Care of Live Stock .....	5	2	Straight machines .....	do .....	163	21
Stone .....	Paving .....	84	15	Warp-machines .....	do .....	40	21
Stone and brick settings .....	Masonry .....	30	4	Straight weld .....	Metal-Tube Manufacture .....	151	13
Stone-gatherers .....	Harrows and Diggers .....	21	2	Straightening .....	Metal-Bending .....	85	14
Stools and seats .....	Chairs .....	215	8	Straightening plates and sheets .....	do .....	11	14
Stools and seats—				Straightening plates and sheets .....			
Duplex .....	do .....	13	8	Straw .....	Sewing-Machines .....	68	24
Pawl and ratchet .....	do .....	52	8	Strawberry-growing .....	Trees, Plants, and Flowers .....	9	1
Pedestals .....	do .....	38	8	Straw-carriers—			
Screw .....	do .....	40	8	Endless aprons .....	Thrashing .....	163	25
Stools—				Overhung rakes .....	do .....	43	25
Cane .....	do .....	60	8	Reels .....	do .....	24	25
Folding .....	do .....	82	8	Shaking tables .....	do .....	140	25
Stop-actions—				Stackers .....	do .....	6	25
Organ .....	Music .....	76	5	Vibrators .....	do .....	50	25
Organ—				Walking-rakes .....	do .....	65	25
Combination .....	do .....	23	5	Straw-cutters—			
Stop-cocks .....	Railway-Brakes .....	8	34	Cutter and bed—			
(See Fluid-pressure train-pipe stop-cocks.)				Reciprocating-knife .....	Vegetable Cutters and Crushers .....	4	25
Stopper-extractors .....	Kitchen and Table Articles .....	37	8	Rotary-cylinder .....	do .....	25	25
Stopper-extractors—				Cylinder and concave .....	do .....	22	25
Hook .....	do .....	40	8	Double-cylinder .....	do .....	21	25
Screw .....	do .....	75	8	Pivoted-knife .....	do .....		
Screw—				Rake-feed .....	do .....	13	25
Lever-operated .....	do .....	25	8	Roller-feed .....	do .....	44	25
Rotary .....	do .....	31	8	Without feed .....	do .....	111	25
Screw and lever .....	do .....	27	8	Rotary-wheel—			
Stopper-fasteners .....	Packing and Storing Vessels .....	62	32	Follower-feed .....	do .....	6	25
(See Glass and pottery, stopper-fasteners.)				Rake-feed .....	do .....	8	25
Stopper-pullers .....	do .....	26	32	Roller-feed .....	do .....	143	25
(See Glass and pottery, stopper-pullers.)				Without feed .....	do .....	13	25
Stoppers .....	do .....	105	32	Single-cylinder—			
(See Glass and pottery, stoppers.)				Rake-feed .....	do .....	2	25
Stopping .....	Carding .....	18	21	Roller-feed .....	do .....	123	25
Stopping .....	Knitting and Netting .....	98	21	Without feed .....	do .....	15	25
Stopping .....	Spinning .....	64	21	Sliding-knife—			
Stopping .....				Rake-feed .....	do .....	32	25
Protector mechanism .....	Weaving .....	30	21	Roller-feed .....	do .....	61	25
Stopping .....	do .....	47	21	Without feed .....	do .....	77	2
Warp-stop motions .....	do .....	23	21	Street-car poles .....	Railway Draft Appliances .....	14	34
Warp-stop motions .....	do .....	99	21	Street-cars .....	Railway Rolling-Stock .....	52	34
Store-service—				(See Cars.)			
Buffers .....	Store-Service .....	14	12	Street-lamps .....	Lamps and Gas-Fittings .....	157	30
Carriers .....	do .....	17	12	Street-light hangers .....	do .....	89	30
Carriers—				Street-sweepers .....	Brushing and Scrubbing .....	223	27
Wheeled .....	do .....	64	12	Stretchers and formers .....	Apparel .....	303	24
Gravity .....	do .....	175	12	Stretchers, canvas .....	Fine Arts .....	40	5
Propulsion .....	do .....	192	12	Stretching .....	Cloth-Finishing .....	75	21
Propulsion—				Stretching .....	Silk .....	9	21
Cable .....	do .....	57	12	Stretching and drying .....	Cloth-Finishing .....	34	21
Spreaders .....	do .....	49	12	Stringers and ties .....	Railways .....	66	4
Switches .....	do .....	65	12	Stringers and ties—			
Stove doors and windows .....	Stoves and Furnaces .....	274	19	Metallic .....	do .....	488	4
Stove-hoods .....	do .....	89	19	Stringing, piano .....	Music .....	37	5
Stove-legs .....	do .....	129	19	Strings, auxiliary .....	do .....	13	5
Stove lids and tops .....	do .....	156	19	Stripping mechanism .....	Carding .....	83	21
Stovepipes .....	do .....	224	19	Structural work .....	Metal-Forging .....	46	13
Stovepipe-shelves .....	do .....	148	19	Studios .....	Photography .....	6	6
Stovepipe-thimbles .....	do .....	279	19	Studios—			
Stove-polishes .....	Painting .....	43	31	Accessories .....	do .....	39	6
Stoves—				Stump-extractors .....	Hoisting .....	28	12
Car .....	Stoves and Furnaces .....	53	19	Stump-extractors—			
Car—				Drum .....	do .....	61	12
Protective casings .....	do .....	35	19	Lever .....	do .....	213	12
Cooking .....	do .....	793	19	Lever and drum .....	do .....	183	12
Cooking—				Screw .....	do .....	45	12
Hearths .....	do .....	39	19	Stylographic pens .....	Stationery .....	49	5
Magazine .....	do .....	83	19	Submarine and torpedo .....	Ships .....	118	22
Reservoir .....	do .....	320	19	Submarine guns .....	Ordnance .....	15	22
				Subsoilers .....	Plows .....	131	1
				Subways .....	Masonry .....	19	4



Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Sucker-rod joints	Hardware-Making	11	13	Systems—			
Sucker-rods	Artesian and Oil Wells	85	25	Display	Electric Lighting	28	16
Sugar and salt crushers	Mills	65	25	Distribution	Electricity. Electric Rail- ways.	42	26
Sugar-making	Sugar and Salt	58	6	Divided central	Telephony	52	16
Suit	Oils, Fats, and Glues	10	31	Hand-regulation	Electric Lighting	72	16
Salkies	Carriages and Wagons	948	10	House	Telephony	20	16
Sun-dials	Horology	42	23	Intermediate sub-sta- tion.	do	81	16
Superheaters	Steam-Boilers	124	18	Multiple switchboard	do	25	16
Supplemental bosoms	Apparel	76	24	Multiple switchboard— Divided central.	do	16	16
Supports	Telephony	90	16	Test	do	189	16
Supports—				Overhead	Electricity. Electric Rail- ways.	139	26
For violins	Music	12	5	Overhead—			
Picture	Fine Arts	72	5	Trolleys	do	312	26
Surfaces	Photography	29	6	Safety	Electric Lighting	39	16
Surfaces	Printing	116	17	Secondary batteries	do	22	16
Surfaces—				Test	do	30	16
Bases	do	25	17	Systems of distribution	Electricity. Generation	152	26
Holders	do	75	17	Tables	Furniture	77	8
Holders—				Tables—			
Sliding-clamp	do	51	17	Adjustable angularly	do	19	8
Planographic	do	61	17	Adjustable angularly and vertically.	do	44	8
Planographic—				Adjustable folding	do	25	8
Hektographs	do	38	17	Adjustable vertically	do	25	8
Holders and supports	do	29	17	Attachments	do	27	8
Rules	do	17	17	Extension	do	26	8
Sensitive	Photography	25	6	Extension—			
Types	Printing	65	17	Center	do	51	8
Surge-relievers	Ships	29	22	End	do	51	8
Surveying-instruments	Optics	93	30	Flexible-top	do	31	8
Suspended	Railway Rolling-Stock	9	34	Slides	do	97	8
Snspenders	Clasps, Buckles, and Buttons	800	11	Folding	do	150	8
Snspension-bridges	Bridges	62	4	Folding—			
Swells—				Sectional-top	do	105	8
Knee	Music	7	5	Kitchen	do	37	8
Organ	do	30	5	Lap	do	23	8
Swimming appliances	Boats	44	22	Leaf-snpports	do	147	8
Swing-bridges	Bridges	49	4	Leg fastening and brac- ing.	do	105	8
Swinging-door openers	Fences	35	1	Pedestals	do	43	8
Swinging gates	do	88	1	Self-waiting	do	67	8
Swinging gates—				Sewing-machine	do	77	8
Folding-panel	do	139	1	Sewing-machine—			
Hand-openers	do	422	1	Covers	do	71	8
Lead-openers	do	177	1	Surgical	do	57	8
Rotary	do	30	1	Wall	do	50	8
Self-closers	do	60	1	Tables and frames	Hides, Skins, and Leather	21	31
Tilting	do	61	1	Tables and racks	Dairy	18	2
Vertically-adjustable	do	142	1	Table-tongs	Kitchen and Table Articles	36	8
Swings	Chairs	199	8	Tablets—			
Switchboards	Telephony	125	16	Writing	Bookbinding	96	5
Switch-chairs	Railways	30	4	Writing—			
Switches	do	114	4	Manifolding	do	69	5
Switches—				Tags and tag-fasteners	Clasps, Buckles, and Buttons	450	11
Automatic	Railways	221	4	Tailoring	Apparel	250	24
Automatic—				Tailpieces, violin	Music	84	5
Safety	do	123	4	Take-ups	Sewing-Machines	119	24
Derailing	do	12	4	Take-ups and let-offs—			
Lap	do	21	4	Beams	Weaving	25	21
Pneumatic	do	16	4	Escapement let-offs	do	25	21
Safety	do	60	4	Friction let-offs	do	98	21
Slip	do	7	4	Let-offs	do	100	21
Spring	do	61	4	Take-ups	do	85	21
Stub	do	61	4	Take-ups and let-offs	do	31	21
Tramway	do	120	4	Take-ups and tensions	Knitting and Netting	45	21
Tramway—				Tank-feeders, railway	Pumps	55	9
Car devices	do	52	4	Tanks	Water-Distribution	221	9
Track devices	do	145	4	Tanners' tools	Hides, Skins, and Leather	37	31
Switch-pieces	do	49	4	Tanning apparatus	do	91	31
Switch-rods	do	45	4	Tanning processes	do	75	31
Switch-signals	do	89	4	Taper	Metal-Rolling	29	13
Switch-stands	do	298	4	Tapping mains	Metal Boring and Drilling	72	13
Syntheis	Electro-Chemistry	4	3	Taps and dies	Metal Bolts, Nuts, Rivets, and Screws.	327	13
Syntheis, ozone	do	19	3	Targets	Firearms	56	22
Syringes	Surgery	302	6	Targets—			
Syringes—				Flying	do	70	22
Expanding-arm	do	18	6	Tassels	Cordage	8	21
Pile	do	13	6	Tattooing	Knitting and Netting	14	21
Water-bag	do	27	6	Tawing processes	Hides, Skins, and Leather	69	31
Systems	Electric Lighting	125	16	Tea-kettles	Stoves and Furnaces	131	19
Systems	Sewerage	14	9	Teddors	Harvesters	162	7
Systems	Telephony	76	16	Teeth	Dentistry	100	20
Systems—				Teeth—			
Automatic	do	46	16	Filling	do	13	20
Automatic regulation	Electric Lighting	89	16	Metal crown	do	24	20
Battery	Electricity. Electric Rail- ways.	65	26	Porcelain crown	do	56	20
Car	Electric Lighting	54	16	Telegraph-poles	Towers	124	4
Central	Telephony	133	16	Telemetry	Measuring-Instruments	17	23
Circuits. Series	Electricity. Electric Rail- ways.	40	26	Telephones	Coin-Controlled Apparatus	47	14
Closed-conduit	do	29	26	Telephones—			
Conduit	do	288	26	Electric	Telephony	246	16
Converter	do	38	26				

\*Reissues.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Telephones—				Time-alarms .....	Horology .....	151	23
Electric—				Time-checks .....	do .....	227	23
Granular .....	Telephony .....	83	16	Time lamp-lighters .....	do .....	99	23
Multiple-electrode .....	do .....	162	16	Time-signals .....	do .....	115	23
Magnetic .....	do .....	271	16	Tinning .....	Coating with Metal .....	122	3
Telescopes .....	Optics .....	25	30	Tip-cups .....	Umbrellas and Canes .....	46	24
Telpher and towing .....	Electricity. Electric Rail- ways .....	48	26	Tips and stiffeners .....	Boots and Shoes .....	200	11
Tempering and anneal- ing—				Wire-setters .....	Wheelwright-Machines .....	54	29
Applications of elec- tricity .....	Annealing and Tempering .....	15	3	Tires .....	Railway Rolling-Stock .....	2	34
Metals other than iron .....	do .....	9	3	(See Wheels.)			
Temples .....	Weaving .....	183	21	Tires—			
Temporary binders .....	Bookbinding .....	589	5	Cushion .....	Carriages and Wagons .....	181	10
Tenoning and boring .....	Woodworking-Machines .....	107	29	Inflating .....	do .....	14	10
Tenoning-bits .....	do .....	90	29	Metallic .....	do .....	61	10
Tensions .....	Sewing-Machines .....	224	24	Pneumatic .....	do .....	309	10
Tents .....	Acconferments .....	17	32	Repairing .....	do .....	13	10
Tents—				Tire-tighteners .....	do .....	219	10
Bed .....	do .....	10	32	Tire-upsetting .....	Wagon, Car, and Track Irons .....	205	13
Frames .....	do .....	61	32	Tobacco—			
Pegs and poles .....	do .....	12	32	Cutters—			
Pipe shields and venti- lators .....	do .....	19	32	Pivoted-knife .....	Tobacco .....	35	2
Shelter .....	do .....	10	32	Reciprocating knife .....	do .....	55	2
Testers .....	Coin-Controlled Apparatus .....	35	14	Rotating-knife .....	do .....	67	2
Lung .....	do .....	12	14	Hangers .....	do .....	88	2
Strike .....	do .....	16	14	Leaf-treating .....	do .....	20	2
Testing .....	Electricity. Special Appli- cations .....	7	16	Leaf-treating—			
Testing illuminating- fluids .....	Measuring-Instruments .....	22	23	Booking .....	do .....	8	2
Testing-instruments .....	Optics .....	18	30	Stem-crushing .....	do .....	10	2
Testing-machines .....	Measuring-Instruments .....	197	23	Stemming .....	do .....	29	2
Tethers .....	Care of Live Stock .....	83	2	Substitutes .....	Medicines .....	26	6
Thatch .....	Roofing .....	7	29	Tobacco-users' appli- cations .....	Tobacco .....	17	2
Theater appliances .....	Fine Arts .....	141	5	Toe-weights .....	Farriery .....	114	14
Thermocauters .....	Surgery .....	13	6	Toilet-cases .....	Toilet .....	69	24
Thermometers .....	Measuring-Instruments .....	82	23	Toilet-kits .....	Baggage .....	18	32
Thermometers—				Toilet-tollers .....	Measuring-Instruments .....	30	23
Metallic .....	do .....	52	23	Toiletries and valves .....	Ordnance .....	6	22
Oven .....	do .....	18	23	Tongs, pokers, and shov- els .....	Stoves and Furnaces .....	117	19
Pyrometers .....	do .....	31	23	Tongue-supports .....	Carriages and Wagons .....	190	10
Thermometers .....	do .....	32	23	Tool-handle fastenings .....	Woodworking-Tools .....	145	29
Thill-couplings .....	Carriages and Wagons .....	1083	10	Tool-handles .....	do .....	121	29
Thill-couplings—				Tool-handles—			
Antirattlers .....	do .....	261	10	do .....	do .....	147	29
Jacks .....	do .....	73	10	Tools .....	Boots and Shoes .....	80	11
Thill-supports .....	do .....	181	10	Sockets .....	Dentistry .....	75	20
Thimbles .....	Apparel .....	43	24	Tools .....	Boots and Shoes .....	20	11
Thimbles—				Tools .....	Dentistry .....	75	20
Manufacture of .....	Metal Personal Wear. Mak- ing .....	7	14	Tools .....	Glass .....	239	15
Thrashers .....	Harvesters .....	76	7	Tools .....	Paving .....	92	15
Thrashing-machines—				Tools .....	Railway Draft Appliances .....	34	
Cylinder-machines .....	Thrashing .....	430	25	(See Couplings, tools.)			
Dust-conveyers .....	do .....	43	25	Tools .....	Sheet-Metal Ware. Making .....	56	14
Flail-machines .....	do .....	23	25	Tools .....	Stone-Working .....	132	25
Vine and seed strippers .....	do .....	115	25	Tools .....	Wire-Working .....	21	14
Thread .....	Nut and Bolt Locks .....	145	14	Tools .....	Woodworking-Tools .....	56	29
Thread—				Tools .....			
Cutters .....	Sewing-Machines .....	40	24	Burr .....	Dentistry .....	17	20
Finishing yarn and .....	Cordage .....	132	21	Engraving .....	Fine Arts .....	50	5
Holders and cutters .....	Apparel .....	99	24	Forceps .....	Dentistry .....	38	20
Key and ratchet .....	Nut and Bolt Locks .....	196	14	Tools and implements .....	Tools and Implements .....	57	13
Thresholds .....	Carpentry .....	51	29	Making .....	do .....	29	24
Throttle .....	Steam-Engine Valves .....	91	18	Toilet .....	Nut and Bolt Locks .....	127	14
Throttle—				Top .....	Medicines .....	421	6
Electric .....	do .....	17	18	Topical remedies .....	Carriages and Wagons .....	105	10
Throttles and caps .....	Spinning .....	161	21	Top joints .....	Nut and Bolt Locks .....	115	14
Throwing .....	Silk .....	23	21	Top, key and ratchet .....	Carriages and Wagons .....	141	10
Ticket-cases .....	Stationery .....	140	5	Top-props .....	Spinning .....	33	21
Ticket-clasps .....	Clasps, Buckles, and Buttons .....	100	11	Top-roll saddles .....	Carriages and Wagons .....	458	10
Ticket-machines .....	Printing .....	25	17	Tops .....	Railway-Brakes .....	21	34
Tickets .....	Bookbinding .....	138	5	Top shoes .....	Lamps and Gas-Fittings .....	59	30
Tide-powers .....	Hydraulic Engineering .....	76	4	Torches .....	Projectiles .....	69	22
Tie-bands .....	Metal Punching and Shear- ing .....	24	14	Torpedoes .....	Music .....	10	5
Tile .....	Roofing .....	97	29	Touch-regulators, keys and keyboards .....			
Tile and metal floors .....	Masonry .....	6	4	Towel racks and stands .....	Furniture .....	33	8
Tile cutters. Brick and .....	Clay and Pottery .....	115	15	Towers—			
Tile-machines .....	do .....	168	15	Fixed .....	Fire Escapes and Ladders .....	29	4
Tile-machines—				Shooting .....	do .....	57	4
Continuous .....	do .....	135	15	Towing—			
Dies .....	do .....	48	15	External power .....	Marine Propulsion .....	31	22
Socket-formers .....	do .....	36	15	Internal power .....	do .....	86	22
Tampers .....	do .....	36	15	Toy building-blocks .....	Gamos and Toys .....	53	7
Till-alarms .....	Builders' Hardware .....	20	20	Toy money-boxes .....	do .....	128	7
Tilting gates .....	Fences .....	92	1	Toy pistols .....	Firearms .....	143	22
Tilting gates—				Toys .....	Games and Toys .....	147	7
Folding-panel .....	do .....	62	1	Trace-carriers .....	Harness .....	200	11
Timbers. Columns and .....	Fireproof Buildings .....	13	4	Track—			
Timber-seats .....	Masonry .....	35	4	Cleaners—			
				Blade and broom .....	Railways .....	83	4
				Centrifugal .....	do .....	133	4
				Dumpers .....	do .....	38	4
				Elevators .....	do .....	34	4
				Explosive .....	do .....	7	4
				Flangers .....	do .....	103	4
				Flangers—			
				Rotary .....	do .....	9	4
				Vibrating .....	do .....	5	4

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Track—				Traveling-bags—			
Cleaners—				Hinge-stays .....	Baggage .....	29	32
Hot plows .....	Railways .....	11	4	Telescoping .....	do .....	23	32
Oilers and washers .....	do .....	18	4	Traveling-bed machines .....	Printing .....	23	17
Plows .....	do .....	163	4	Traveling-flat cards .....	Carding .....	37	21
Removing weeds .....	do .....	5	4	Trays .....	Kitchen and Table Articles .....	82	8
Soow-guards .....	do .....	8	4	Trays—			
Stock-alarms .....	do .....	15	4	Attaching devices .....	do .....	12	8
Clearers and dividers .....	Harvesters .....	81	7	Trays and tanks .....	Photography .....	77	6
Curves .....	Railways .....	25	4	Treadles .....	Machine Elements .....	485	12
Fastenings .....	do .....	125	4	Treadles—			
Irons, miscellaneous .....	Wagon, Car, and Track Irons .....	62	13	Hand attachments .....	do .....	30	12
Layers .....	Railways .....	85	4	Treating molten iron .....	Metallurgy .....	50	3
Miscellaneous .....	do .....	76	4	Treating molten iron—			
Platforms .....	do .....	5	4	Air, steam, and gases .....	do .....	103	3
Raisers .....	do .....	83	4	Alloys .....	do .....	73	3
Traction .....	do .....	70	4	Basic .....	do .....	47	3
Traction—				Basic linings .....	do .....	41	3
Cable-shields .....	do .....	6	4	Granulating .....	do .....	14	3
Crossing conduits .....	do .....	43	4	Oxides .....	do .....	85	3
Crossing streams .....	do .....	11	4	Physic .....	do .....	87	3
Curves .....	do .....	70	4	Scrap .....	do .....	31	3
Engines .....	Carriages and Wagons .....	354	10	Vacuum .....	do .....	5	3
Increases .....	Railway Rolling-Stock .....	29	34	Treatment .....	Trees, Plants, and Flowers .....	18	1
(See Locomotives.)				Treatment—			
Running and carrying	Railways .....	36	4	Implements .....	do .....	30	1
rope .....				Tree-covering .....	do .....	13	1
Slot-closers .....	do .....	17	4	Trellises .....	do .....	57	1
Slot-switches .....	do .....	27	4	Tremolos .....	Music .....	58	5
Take-ups .....	do .....	17	4	Trimmers .....	Sewing-Machines .....	170	24
Underground .....	do .....	234	4	Trimnings .....	Apparel .....	163	34
Wheels .....	Carriages and Wagons .....	217	10	Trimnings .....	Harness .....	200	11
Train-operated .....	Railway-Brakes .....	18	34	Tripods .....	Optics .....	54	30
Train-operated—				Trolley-operated track-	Electricity. Electric Rail-	8	26
Rotary shafts .....	do .....	47	34	switches .....	ways .....		
Winding .....	do .....	109	34	Trolleys .....	do .....	312	26
Train-order signals .....	Railways .....	13	4	Trough and beater .....	Driers .....	103	28
Trains, power-transmit-	Railway Rolling-Stock .....	8	34	Trough and screw .....	do .....	23	28
ters .....				Troughs and moldings .....	Sheet-Metal Ware. Making .....	105	14
Tramway-switches .....	Railways .....	120	4	Truck and rail—			
Transfers .....	Fine Arts .....	44	5	Horizontal .....	Driers .....	85	28
Transfer-tables .....	Railways .....	27	4	Inclined .....	do .....	22	28
Transformers—				Truck-changers .....	Railways .....	25	4
Rotary .....	Electricity. Generation .....	28	26	Trucks .....	Carriages and Wagons .....	256	16
Stationary .....	do .....	109	26	Trucks .....	Railway Rolling-Stock .....	182	34
Transmission of power—				Trucks—			
Alternating .....	Electricity. Motive-Power .....	17	26	Antifriction-wheels .....	do .....	19	34
Alternating—				Barrel .....	Carriages and Wagons .....	40	10
Phase-modifiers .....	do .....	14	26	Bolsters .....	Railway Rolling-Stock .....	28	34
Direct .....	do .....	45	26	Bolsters—			
Reciprocating .....	do .....	47	26	Cast .....	do .....	7	34
Transmitters .....	Telegraphy .....	69	16	Guides .....	do .....	6	34
Transom-lifters .....	Builders' Hardware .....	170	20	Pressed-steel .....	do .....	5	34
Transom-lifters—				Trussed .....	do .....	18	34
Pivots .....	do .....	44	20	Brick .....	Carriages and Wagons .....	31	10
Transplanters .....	Harrows and Diggers .....	14	1	Cable-grip .....	Railway Rolling-Stock .....	16	34
Transplanters—				Center bearings .....	do .....	21	34
Dibbles .....	do .....	13	1	Center bearings—			
Pivoted jaws .....	do .....	74	1	Pressed-steel .....	do .....	11	34
Post-hole diggers .....	do .....	53	1	Roller .....	do .....	5	34
Post-hole diggers—				Changeable-gage .....	do .....	49	34
Pivoted jaws .....	do .....	6	1	Curve-adjusters, swiv-	do .....	8	34
Sliding jaws .....	do .....	7	1	eled wheel .....			
Wheel-machines .....	do .....	61	1	Drying .....	Carriages and Wagons .....	14	10
Transplanting-pots .....	Trees, Plants, and Flowers .....	35	1	Electric-motor—			
Transposers .....	Music .....	42	5	Bogies .....	Railway Rolling-Stock .....	10	34
Transposition and har-	do .....	38	5	Equalizing-levers .....	do .....	16	34
mony charts .....				Motor-supporters .....	do .....	31	34
Transposition-chairs .....	do .....	38	5	Rigid-frame .....	do .....	54	34
Trap-belts .....	Trees, Plants, and Flowers .....	68	1	Elevating .....	Carriages and Wagons .....	70	10
Traps—				Four-wheel—			
Bedbug .....	Fishing and Trapping .....	8	22	Bogies .....	Railway Rolling-Stock .....	102	34
Cage .....	do .....	118	22	Curve-adjusters—			
Expansion .....	Steam-Engines .....	123	18	Axles—			
Fish .....	Fishing and Trapping .....	105	22	Radial .....	do .....	26	34
Impalement .....	do .....	156	22	Sectional .....	do .....	17	34
Insect .....	do .....	299	22	Frames .....	do .....	11	34
Jaw .....	do .....	222	22	Frames—			
Self-set and ever-set .....	do .....	365	22	Pressed-steel .....	do .....	12	34
Sporting .....	do .....	17	22	House-moving .....	Carriages and Wagons .....	36	10
Victim-set .....	do .....	98	22	Implement .....	do .....	32	10
Wire-choker .....	do .....	42	22	Pedestals .....	Railway Rolling-Stock .....	67	34
Travelers .....	Ships .....	14	32	Piano .....	Carriages and Wagons .....	34	10
Traveling-bags .....	Baggage .....	60	32	Safety-supporters .....	Railway Rolling-Stock .....	14	34
Traveling-bags—				Side bearings .....	do .....	15	34
Convertible .....	do .....	10	32	Side bearings—			
Fasteners .....	do .....	49	32	Roller .....	do .....	17	34
Fasteners—				Six-wheel .....			
Pivoted .....	do .....	30	32	Bogies .....	do .....	13	34
Frameless .....	do .....	19	32	Curve-adjusters,	do .....	38	34
Frames .....	do .....	80	32	axles, radial .....			
Frames—				Supplemental .....	do .....	8	34
Top-opening .....	do .....	19	32	Water-harrel .....	Carriages and Wagons .....	25	10
Handle-fasteners .....	do .....	33	32	Trumpets. Cornets and .....	Music .....	73	5
Handles .....	do .....	21	32	Trundle and hoops .....	Games and Toys .....	9	7
				Trunk-fasteners .....	Locks and Latches .....	91	20

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Trunk-guards—				Umbrella-irons	Hardware-Making	37	13
Cattle	Trees, Plants, and Flowers	36	1	Umbrellas—			
Vermis	do	26	1	Folding	Umbrellas and Canes	76	24
Trunks	Baggage	132	32	Self opening and closing	do	25	24
Trunks—				Supporters	do	176	24
Bureau	do	38	32	Umbrella-stands	Furniture	64	8
Convertible	do	9	32	Underground	Electricity. Conductors	476	26
Convertible—				Underwaists	Crimoline and Corsets	42	24
Bed	do	25	32	Unicycles	Velocipedes	34	7
Corner-shields	do	41	32	Universal joiners	Woodworking-Machines	51	29
Cylindrical	do	16	32	Universal joints	Machioe Elements	153	12
Desk and table	do	15	32	Upholstery	Chairs	42	8
Extensible	do	12	32	Upper-machines	Boots and Shoes	450	11
Followers	do	20	32	Uppers	do	660	11
Handles	do	13	32	Upsetting metal	Metal-Forging	18	13
Hinge-stays	do	20	32	Urinals	Baths and Closets	67	9
Lid-stays	do	58	32	Urinary apparatus	Surgery	8	0
Straps and strap-fasteners.	do	44	32	Utilizing tin-scrap	Metallurgy	25	3
Supporting devices	do	12	32	Utilizing tin-scrap—			
Tray lifters and supporters.	do	38	32	Wet processes	do	37	3
Trays	do	23	32	Vacuum	Railway-Brakes	63	34
Wall	do	14	32	(See Fluid-pressure, vacuum.)			
Wardrobe	do	20	32	Vacuum-pans	Sugar and Salt	155	6
Trunnions	Ordnance	22	22	Vacuum pumps. Steam and	Steam and Vacuum Pumps	227	18
Truss-bridges	Bridges	426	4	Valleys	Roofing	7	29
Trusses	Surgery	544	6	Valve-gear	Steam-Engines	355	18
T-square	Drafting	44	23	Valve-gear—			
Tube-clamps	Artesian and Oil Wells	132	25	Link	do	185	18
Tube-machines	Paper-Manufactures	17	17	Rod	do	63	18
Tube-machines—				Shifting-eccentric	do	185	18
Folders	do	15	17	Shifting-eccentric—			
Spiral-wind	do	16	17	Automatic	do	329	18
Straight-wind	do	44	17	Tripping cut-off	do	222	18
Tubes	Metal-Drawing	57	13	Valves	Pumps	210	9
Tubes	Metal-Tube Manufacture	59	13	Valves and port-stoppers	Ships	31	22
Tubes and fines	Steam-Boilers	251	18	Valves for inflation	Water-Distribution	31	9
Tubing—				Vapor-baths	Baths and Closets	105	9
Curved and spouts	Sheet-Metal Ware. Making	11	14	Vapor-burners	Lamps and Gas-Fittings	418	30
Grooving and seaming	do	33	14	Vapor-generators	Steam-Boilers	50	18
Pipe-elbows. Making	do	64	14	Vaporizers	Electricity. Medical and	7	26
Straight. Making	do	62	14		Surgical		
Tubing and packing	Artesian and Oil Wells	346	25	Varnishes—			
Tubular-cutter lathes	Wood-Turning	101	29	Alkali	Painting	23	31
Tubular saw	Wood-Sawing	64	29	Oil	do	111	31
Tuck creasers and markers.	Sewing-Machines	145	24	Processes and apparatus	do	45	31
Tucking-guides	do	84	24	Pyroxyline	do	71	31
Tugs	Harness	200	11	Tar	do	57	31
Tumbler-washers	Washing Apparatus	42	27	Vats	Hides, Skins, and Leather	54	31
Tumbling-drums	Hides, Skins, and Leather	47	31	Vats—			
Tuning-instruments	Music	37	5	Apron	Bleaching and Dyeing	43	6
Tuning-pegs, violin	do	50	5	Close	do	42	6
Tuning-pins, piano	do	20	5	Open	do	212	6
Tunnels	Hydraulic Engineering	67	4	Vault-covers	Paving	329	15
Tunnels—				Velocipedes	Railway Rolling-Stock	19	34
Excavators	do	16	4	Velocipedes—			
Shields	do	9	4	Bicycle attachments	do	6	34
Turbines				Geared	do	29	34
Bottom-supply	Hydraulic Motors	85	9	Vending devices, ribbon-holders.	Advertising	78	32
Side-ring supply	do	452	9	Venetian blinds	Curtains, Shades, and Screens	70	8
Top and side direct-supply.	do	402	9	Ventilating	Ships	39	22
Top-ring supply	do	192	9	Ventilation—			
Turning fabrics	Sewing-Machines	47	24	Car	Pneumatics	347	28
Turners, leaf	Music	227	5	Grain	do	59	28
Turning—				House	do	292	28
Irregular forms	Metal Turning, Planing, and Milling.	19	13	Mine	do	30	28
Miscellaneous	do	301	13	Ventilators, window	do	155	28
Tapers	do	31	13	Vents	Lamps and Gas-Fittings	9	30
Wheels and axles	do	105	13	Vents and stoppers	Ordnance	8	22
Turnstiles	Fences	8	1	Vessels—			
Turn-tables	Railways	133	4	Angular bending	Sheet-Metal Ware. Making	62	14
Turpentine	Ammonia, Water, and Wood-Distillation.	9	31	Curved bending	do	36	14
Turpentine—				Die-seaming	do	140	14
Apparatus	do	37	31	Die-shaping	do	127	14
Gathering	Trees, Plants, and Flowers	20	1	Die-shaping—			
Processes	Ammonia, Water, and Wood-Distillation.	32	31	Fillers and forcers	do	22	14
Turrets	Ships	30	22	Roller-seaming	do	127	14
Twine-cutters	Cutlery	78	13	Wiring and flanging	do	38	14
Twine-holders	Store-Furniture	64	8	Vestibule-cars	Railway Rolling-Stock	93	34
Twine-holders—				(See Cars, vestibule.)			
Take-up	do	25	8	Veterinary	Medicines	69	6
Take-up—				Veterinary	Surgery	167	6
Rotary	do	20	8	Veterinary—			
Twisting	Metal Bending	19	14	Horse-shields	do	21	6
Twisting-heads	Spinning	32	21	Vine-cutters, stalk-choppers.	Harrows and Diggers	13	1
Tying-in warps	Weaving	22	21	Violin—			
Type-cases	Printing	92	17	Bows	Music	21	5
Type-machines	do	22	17	Bridges	do	26	5
Type-writer cabinets	Furniture	94	8	Chin-rests	do	30	5
Ullage-rods	Measuring-Instruments	14	23	Dampers and mutes	do	33	5
Ultramarine	Painting	9	31	Harmonic dampers	do	9	5
				Pianos	do	15	5
				Tailpieces	do	84	5
				Tuning-pegs	do	50	5

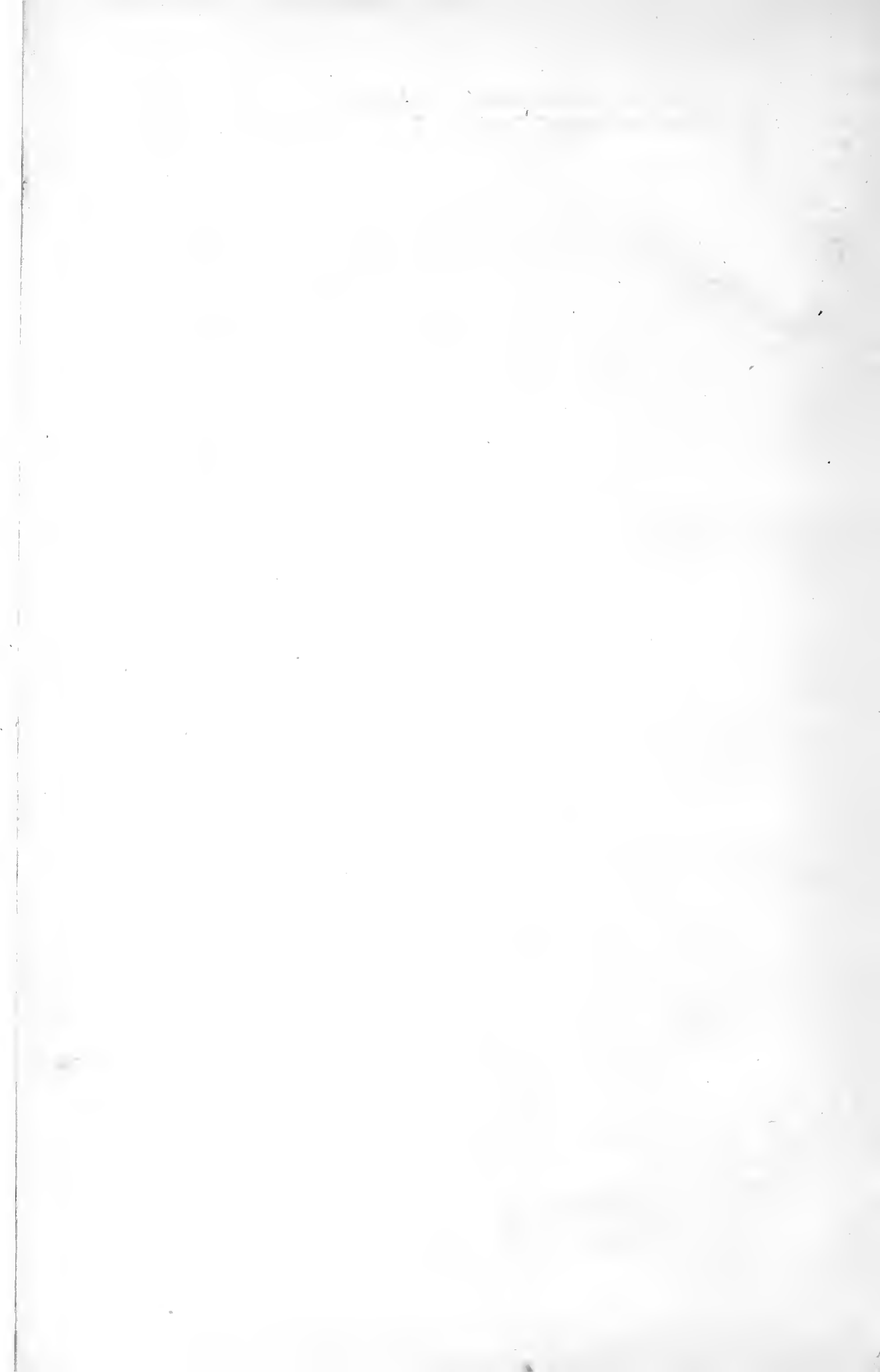
Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Viollins .....	Music .....	73	5	Water-tubes .....	Steam-Boilers .....	818	18
Viollins—				Wax .....	Oils, Fats, and Glue .....	30	31
Practice .....	do .....	4	5	Wax-thread .....	Sewing-Machines .....	181	24
Supports .....	do .....	12	5	Weather-boarding .....	Carpentry .....	33	29
Vices—				Weather-strips—			
Pipe and rod .....	Metal-Working Tools .....	75	14	Hinged .....	do .....	209	29
Smiths' .....	do .....	357	14	Hinged—			
Woodworkers' .....	do .....	90	14	Sills .....	do .....	79	29
Vocal exercising devices .....	Music .....	4	5	Packing .....	do .....	120	29
Voting-booths .....	Carpentry .....	35	29	Sliding .....	do .....	112	29
Voting-machines .....	Measuring-Instruments .....	63	23	Weather-vanes .....	Measuring-Instruments .....	12	23
Vulcanized fiber .....	Caoutchouc and Minor Plas- tics, .....	36	15	Weaving, cross .....	Weaving .....	39	21
Vulcanizing apparatus .....	do .....	207	15	Web .....	Driers .....	41	28
Wadding .....	Carding .....	60	21	Weed-turners .....	Plows .....	60	1
Waffle-irons .....	Stoves and Furnaces .....	34	19	Wet-forks .....	Weaving .....	23	21
Wagon axles and boxes .....	Wagon, Car, and Track Irons .....	103	13	Weighing .....	Coin-Controlled Apparatus .....	37	14
Making .....				Weighing—			
Wagon-raisers .....	Hoisting .....	69	12	Recorders .....	do .....	13	14
Wagon tires and fellies .....	Wagon, Car, and Track Irons .....	56	13	Weights .....	Measuring-Instruments .....	23	23
Making .....				Weights—			
Walking-beams .....	Artesian and Oil Wells .....	82	25	Paper .....	Stationery .....	28	5
Wall-protectors .....	Furniture .....	27	8	Welding .....	Metal-Welding .....	30	13
Walls—				Wells—			
Composite .....	Masonry .....	13	4	Cleaning .....	Artesian and Oil Wells .....	55	25
Hollow tile .....	do .....	12	4	Drilling and boring .....	do .....	401	25
Wardrobes .....	Furniture .....	43	8	Wharves .....	Hydraulic Engineering .....	8	4
Wardrobes—				Wheel and rail .....	Railway-Brakes .....	23	34
Knockdown .....	do .....	29	8	Wheel and rail—			
Warping .....	Cordage .....	116	21	Chock block .....	do .....	64	34
Warping reeds .....	do .....	6	21	Wheel-attaching devices .....	Railway Rolling-Stock .....	70	34
Warp-stop motions .....	do .....	52	21	(See Axles.)			
Washbenches .....	Laundry .....	85	27	Wheelbarrows .....	Carriages and Wagons .....	153	10
Washboards .....	do .....	231	27	Wheel-bodies—			
Washboilers .....	do .....	409	27	Cast in tires .....	Railway Rolling-Stock .....	16	34
Washing-machines—				Cast on hubs .....	do .....	6	34
Agitator .....	do .....	228	27	Wheeled toys .....	Games and Toys .....	87	7
Boiler .....	do .....	194	27	Wheel-fenders .....	Railway Rolling-Stock .....	38	34
Combined washing and wringing .....	do .....	44	27	Wheel-fenders—			
Cylinder .....	do .....	215	27	Car and truck equalizers .....	do .....	9	34
Miscellaneous .....	do .....	67	27	Combined-brake .....	do .....	20	34
Pounder .....	do .....	713	27	Fixed-scoop .....	do .....	10	34
Reciprocating-rubber .....	do .....	820	27	Folding, hinged-scoop .....	do .....	32	34
Rocking and swinging .....	do .....	147	27	Hinged-scoop .....	do .....	24	34
Roller .....	do .....	113	27	Inclined, tilt-up front .....	do .....	19	34
Roller and bed .....	do .....	493	27	Obstacle-projectors .....	do .....	13	34
Rotary-rubber .....	do .....	239	27	Pilot type .....	do .....	50	34
Washstands .....	Furniture .....	83	8	Rotary, positively- driven .....	do .....	22	34
Washstands—				Trip and drop scoop .....	do .....	29	34
Reservoir .....	do .....	26	8	Trip and shoot forward .....	do .....	11	34
Washtubs .....	Laundry .....	33	27	Wheeled-scoop .....	do .....	16	34
Watch-balances .....	Horology .....	102	23	Wheel-tread .....	do .....	50	34
Watch-barrels .....	do .....	51	23	Wheel-harrows .....	Harrows and Diggers .....	189	1
Watchcases .....	do .....	344	23	Wheel-harrows—			
Watchcase-springs .....	do .....	97	23	Disk .....	do .....	12	1
Watch-chain attachments .....	Jewelry .....	84	5	Spring .....	do .....	70	1
Watch dust-caps .....	Horology .....	42	23	Trailing teeth .....	do .....	29	1
Watches .....	do .....	120	23	Wheels .....	Carriages and Wagons .....	646	10
Watches and clocks .....	Metal Personal Ware. Mak- ing .....	165	14	Wheels—			
Watch-keys .....	Horology .....	112	23	Bushings .....	Railway Rolling-Stock .....	6	34
Watchmakers' lathes .....	Metal Turning, Planing, and Milling .....	151	13	Counterbalances .....	do .....	4	34
Watchmakers' tools .....	Horology .....	174	23	Epicyclic .....	do .....	4	34
Watch-plates .....	do .....	36	23	Flanges, independent movement .....	do .....	9	34
Watch-regulators .....	do .....	120	23	In channels .....	Marine Propulsion .....	15	22
Watch-stops .....	do .....	103	23	Integral—			
Watch-winding .....	do .....	52	23	Cast .....	Railway Rolling-Stock .....	39	34
Water .....	Ammonia, Water, and Wood- Distillation .....	69	31	Cast—			
Water .....	Gas .....	184	31	Hollow webs .....	do .....	54	34
Water and air .....	Safts .....	34	20	Roller-bearings .....	do .....	13	34
Water-closet and sewer ventilation .....	Baths and Closets .....	119	9	Spokes—			
Water-closet attachments .....	do .....	240	9	Cast in .....	do .....	20	34
Water-closets—				Metallic, detachable .....	do .....	16	34
Plunger .....	do .....	81	9	Wooden .....	do .....	7	34
Siphon .....	do .....	99	9	Spring .....	Carriages and Wagons .....	51	10
Valved .....	do .....	270	9	Tire-fasteners .....	Railway Rolling-Stock .....	29	34
Washout .....	do .....	52	9	Tire-fasteners—			
Water-closet valves .....	do .....	139	9	Bolted lap-flanges .....	do .....	21	31
Water-coolers .....	Refrigeration .....	282	28	By casting .....	do .....	5	34
Water-elevators .....				Integral lugs .....	do .....	12	34
Compressed-air .....	Pumps .....	123	9	Transverse interme- diate keys .....	do .....	8	34
Windlass .....	do .....	314	9	Tires—			
Water fire-boxes .....	Steam-Boilers .....	316	18	Cushioned—			
Water-gages .....	Measuring-Instruments .....	157	23	Metallic springs .....	do .....	5	34
Water-gages—				Rubber .....	do .....	65	34
Float .....	do .....	82	23	Wooden blocks .....	do .....	10	34
Water-gates—				Loose .....	do .....	6	34
Sliding .....	Hydraulic Engineering .....	39	4	Non-metallic .....	do .....	13	34
Swinging .....	do .....	61	4	Roller-supported .....	do .....	13	34
Waterproofing and sizing .....	Paper-Making .....	279	15	Sheets .....			
Water, purifying .....	Chemicals .....	75	6	Sheet-metal disks .....	do .....	35	34
Water-supply hose-hold- ers .....	Water-Distribution .....	61	9	Sheet-metal disks—			
Water-tube, coil .....	Steam-Boilers .....	168	18	Non-metallic filling .....	do .....	29	34
				Single .....	do .....	6	34
				Split castings, detach- able tires .....	do .....	14	34
				Wooden .....	do .....	13	34

## SUB-CLASSES ALPHABETICALLY ARRANGED.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Wheels—				Wire fences—			
Webs and tires, pressed-steel.	Railway Rolling-Stock.....	16	34	Stays.....	Fences.....	42	1
Wheel tread-surfaces.....	do.....	11	34	Stays—			
Wheel tread-surfaces—				Linked.....	do.....	22	1
Form.....	do.....	10	34	Lock-plates.....	do.....	16	1
Multiple.....	do.....	12	34	Strands.....	do.....	31	1
Peripheral rollers.....	do.....	5	34	Wire gates.....	do.....	41	1
Recessed.....	do.....	9	34	Wire gates—			
Wheelwright-machines.....	Wheelwright-Machines.....	79	29	Frameless.....	do.....	32	1
Whiffletree-hooks.....	Carriages and Wagons.....	421	10	Wire-pointing.....	Metal-Forging.....	66	13
Whiffletrees.....	do.....	436	10	Wire-reels.....	Metal-Drawing.....	94	13
Whips.....	Harness.....	300	11	Wire-shears.....	Cutlery.....	26	13
Whip-sockets.....	do.....	200	11	Wire-stretchers—			
Wick-pickers.....	Lamps and Gas-Fittings.....	10	30	Permanent.....	Fences.....	18	1
Wick-raisers, flat.....	do.....	51	30	Permanent—			
Wicks.....	do.....	77	30	Compensators.....	do.....	51	1
Wick-trimmers.....	Cutlery.....	48	13	Mid-wire take-ups.....	do.....	48	1
Wind-chests, organ.....	Music.....	3	5	Path-closers.....	do.....	13	1
Winding.....	Cloth-Finishing.....	54	21	Post-winders.....	do.....	80	1
Winding.....	Silk.....	38	21	Post-winders—			
Winding.....	Wire-Working.....	19	14	Vertical.....	do.....	21	1
Winding-axle.....	Railway-Brakes.....	27	34	Removable.....	do.....	32	1
Winding-balls.....	Cordage.....	25	21	Removable—			
Winding-bobbins—				Clutch-bars.....	do.....	10	1
Sewing-machine shut- tle.....	do.....	107	21	Grips.....	do.....	36	1
Warp-wind.....	do.....	128	21	Levers.....	do.....	52	1
Weft-wind.....	do.....	76	21	Levers—			
Winding-heddle and seine-needles.....	do.....	4	21	Attached.....	do.....	20	1
Winding-drum.....	Railway-Brakes.....	64	34	Loopers.....	do.....	30	1
Winding, pneumatic shift.....	do.....	8	34	Rack-bars.....	do.....	6	1
Winding-spools.....	Cordage.....	27	21	Ratchet-bars.....	do.....	34	1
Winding-tatting-shuttles.....	do.....	4	21	Reel-carriers.....	do.....	124	1
Windlasses. Capstans and.....	Hoisting.....	78	12	Screw.....	do.....	16	1
Windlass water-elevators.....	Pumps.....	314	9	Tongs.....	do.....	8	1
Window and door but- tons.....	Builders' Hardware.....	253	20	Twin-hooks.....	do.....	71	1
Automatic.....	do.....	91	20	Windlasses.....	do.....		
Screw.....	do.....	16	20	Wiring—			
Sliding bolts.....	do.....	51	20	Blinds.....	Woodworking-Machines.....	45	29
Strips.....	do.....	6	20	Bottle and corks.....	Wire-Working.....	30	14
Trippers.....	do.....	32	20	Brushes and cards.....	do.....	37	14
Vertically-swinging.....	do.....	84	20	Wood.....	do.....	13	14
Window and plate glass.....	Glass.....	68	15	Wood—			
Window—				Fences.....	do.....	166	14
Bead-fasteners.....	Builders' Hardware.....	40	20	Fences—			
Chairs.....	Carpentry.....	98	29	Gear.....	do.....	48	14
Cleaners.....	Brushing and Scrubbing.....	56	27	Rack-bar.....	do.....	30	14
Cornices.....	Curtains, Shades, and Screens.....	72	8	Sprocket.....	do.....	86	14
Gardens.....	Trees, Plants, and Flowers.....	43	1	Fencing.....	do.....	116	14
Guards.....	Carpentry.....	67	29	Wood.....	Ammonia, Water, and Wood- Distillation.....	58	31
Openers.....	Fences.....	14	1	Wood.....			
Sashes.....	Carpentry.....	107	29	Bent.....	Gas.....	61	31
Sashes—				Bungs.....	Paving.....	124	15
Sliding.....	do.....	88	29	Bungs and vents.....			
Sliding and swinging.....	do.....	135	29	Bunge and vents—			
Swinging.....	do.....	66	29	Expanding.....	do.....	24	32
Screens.....	Curtains, Shades, and Screens.....	214	8	Plug.....	do.....	36	32
Screens—				Bung-wrenches.....	do.....	24	32
Exits.....	do.....	48	8	Closures.....	do.....	176	32
Extensible.....	do.....	101	8	Closures—			
Rolling.....	do.....	123	8	Screw and bayonet.....	do.....	24	32
Shades.....	do.....	35	8	Compartment.....	do.....	19	32
Ventilators.....	Pneumatics.....	155	28	Covers.....	do.....	71	32
Windows.....	Carpentry.....	66	29	Heads.....	do.....	56	32
Windows.....	Iron Structures.....	21	4	Hoops.....	do.....	154	32
Windows—				Knockdown.....	do.....	33	32
Car.....	Carpentry.....	49	29	Linings and coverings.....	do.....	33	32
Wind-wheels—				Stands.....	do.....	128	32
Horizontal.....	Wind-Wheels.....	336	28	Ventilating.....	do.....	24	32
Oscillating.....	do.....	12	28	Wooden boxes.....	do.....	67	32
Vertical feathering- blades.....	do.....	364	28	Wooden boxes—			
Vertical solid-wheel.....	do.....	617	28	Bent.....	do.....	55	32
Wine-coolers.....	Refrigeration.....	27	28	Bent—			
Wines.....	Alcohol.....	18	31	Closures.....	do.....	34	32
Wipers.....	Coating with Metal.....	31	3	Single-blank.....	do.....	38	32
Wire.....	Metal-Drawing.....	60	13	Block.....	do.....	22	32
Wire-covering.....	do.....	16	13	Can and bottle cases.....	do.....	93	32
Wire fabric.....	Fences.....	49	1	Can and bottle cases—			
Wire fabric, &c., orna- mental.....	Jewelry.....	28	5	Vial-cases.....	do.....	40	32
Wire-fasteners.....	Fences.....	18	1	Cell-cases.....	do.....	58	32
Wire-fasteners—				Cell-cases—			
Clamps.....	do.....	20	1	Cloth or cord.....	do.....	26	32
Hook-nails and staples.....	do.....	40	1	Paper.....	do.....	145	32
Wire fences.....	do.....	133	1	Paper boxes.....	do.....	33	32
Picket.....	do.....	104	1	Wood.....	do.....	39	32
				Wood-veneer.....	do.....	32	32
				Closures.....	do.....	93	32
				Compartment.....	do.....	68	32
				Crates.....	do.....	66	32

\*Reissue.

Sub-class.	Class.	No. of patents in sub-class.	Division.	Sub-class.	Class.	No. of patents in sub-class.	Division.
Wooden boxes—				Wool cleaning .....	Bleaching and Dyeing .....	50	6
Crates—				Wool oiling .....	Carding .....	37	21
Fruit-boxes .....	Packing and Storing Vessels	35	32	Wool-washing machines.	Washing Apparatus .....	124	27
Hat .....	do .....	22	32	Work-benches .....	Woodworking-Tools .....	56	29
Package .....	do .....	27	32	Work-boxes .....	Apparel .....	85	24
Poultry .....	do .....	14	32	Work-holders .....	do .....	28	24
Crates and boxes—				Work-holders .....	Painting .....	33	31
Folding .....	do .....	61	32	Working rattan .....	Woodworking-Machines .....	53	29
Folding—				Wrappers .....	Tobacco .....	8	2
Poultry .....	do .....	73	32	Wrapping-machines .....	Paper-Manufactures .....	54	17
Knockdown .....	do .....	67	32	Wrenches .....	Tools and Implements.	33	13
Linings and coverings	do .....	34	32		Making		
Powders. Cases for .....	do .....	41	32	Wringer-rolls .....	Laundry .....	90	27
Stays, corner .....	do .....	43	32	Wringers .....	do .....	484	27
Straps .....	do .....	51	32	Wrist-pin turners .....	Metal Turning, Planing, and	31	13
Toilet and silverware .....	do .....	20	32		Milling.		
Wooden pins. Making .....	Woodworking-Machines.	26	29	Writing-tablets .....	Bookbinding .....	96	5
Wooden trays. Making .....	do .....	27	29	Writing-tablets—			
Wooden vessels—				Continuous .....	do .....	50	5
Baskets .....	Packing and Storing Vessels	160	32	Manifolding .....	do .....	69	5
Baskets—				Wrought-nail making .....	Nails and Spikes .....	171	13
Covered .....	do .....	67	32	Yards and plants .....	Railways .....	19	4
Folding .....	do .....	18	32	Yarn-controllers .....	Spinning .....	94	21
Wooden walls .....	Carpentry .....	28	29	Yarn guides and clearers.	Cordage .....	69	21
Wood-grinders .....	Paper-Making .....	203	15	Zinc salts .....	Painting .....	34	31
Wood ornamentation .....	Woodworking-Machines .....	73	29	Zithers .....	Music .....	14	5
Wood saturation .....	Preserving .....	287	6	Zithers—			
Wood-screw machines .....	Metal Bolts, Nuts, Rivets,	184	13	Keyed .....	do .....	6	5
	and Screws.			Picks .....	do .....	4	5





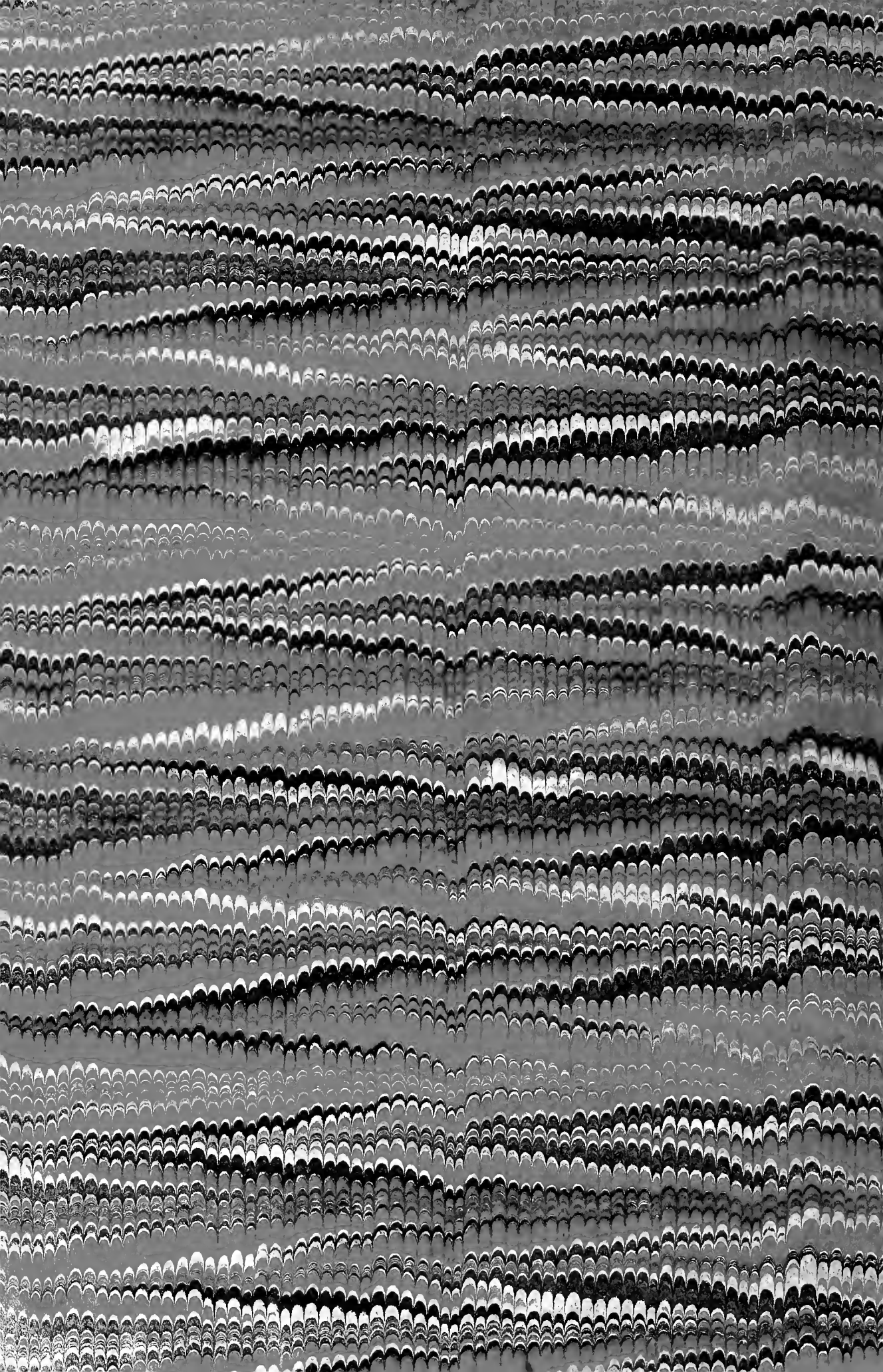


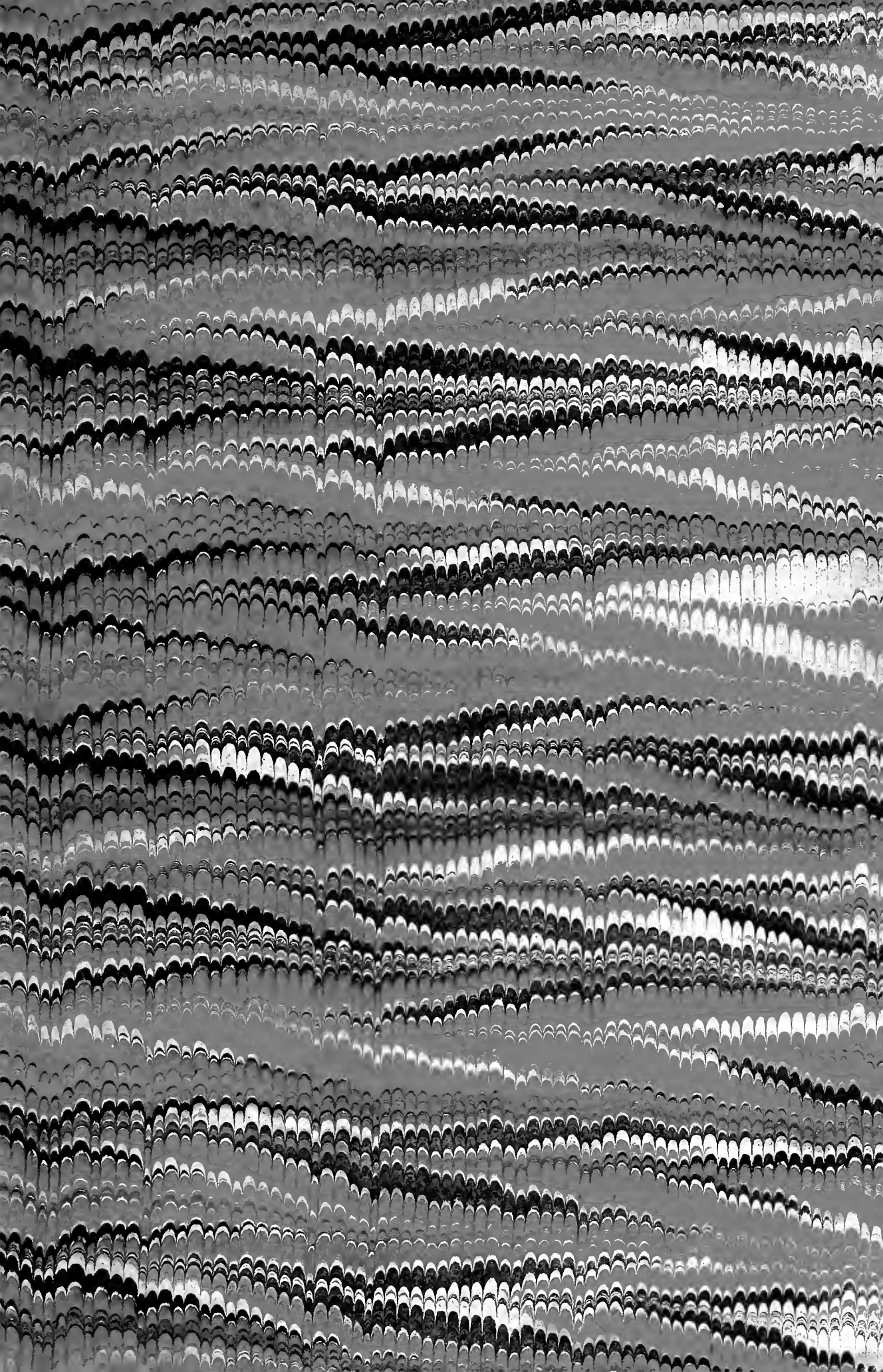












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